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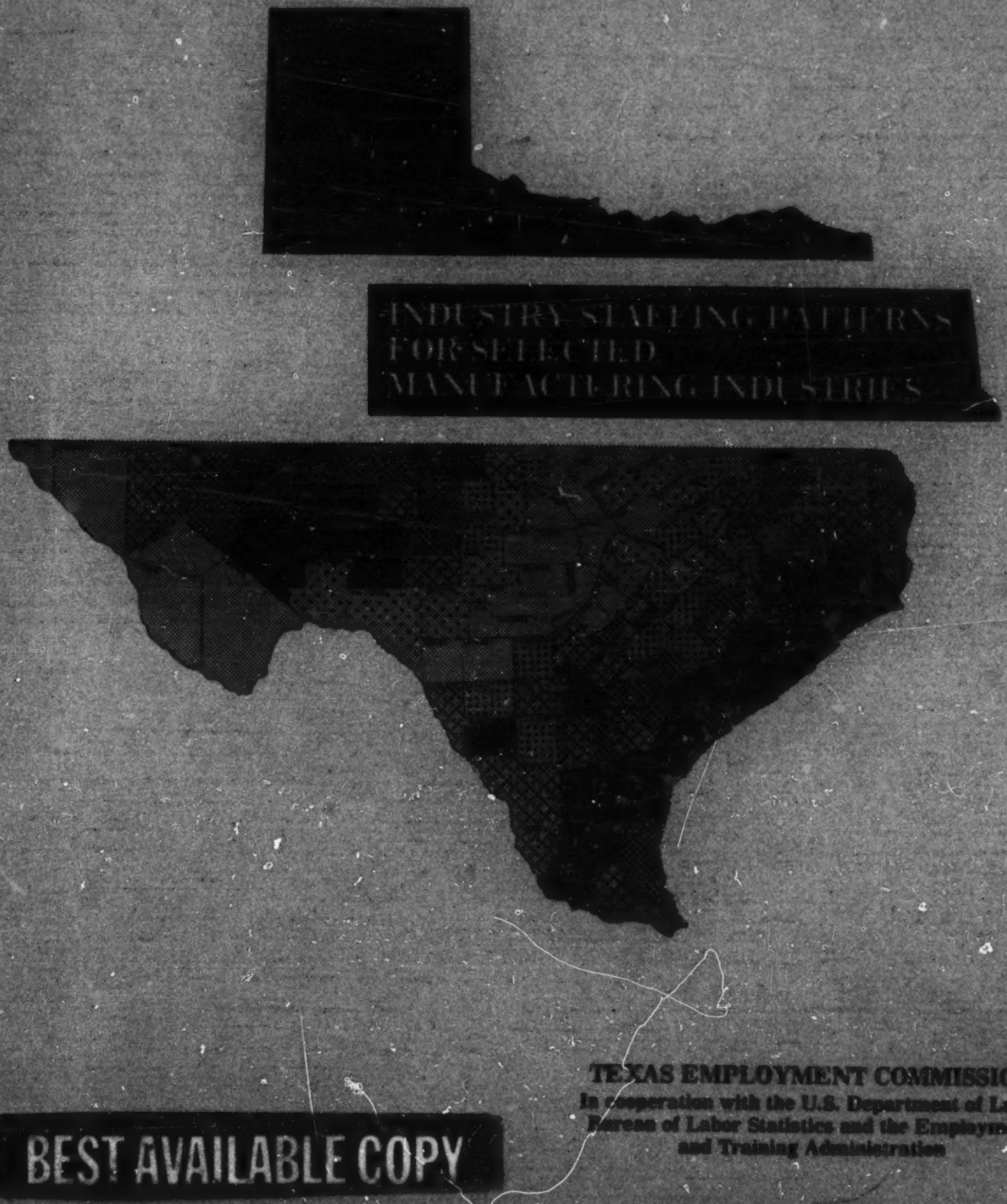
TEXAS OCCUPATIONAL EMPLOYMENT STATISTICS



INDUSTRY STAFFING PATTERNS FOR SELECTED MANUFACTURING INDUSTRIES

TEXAS EMPLOYMENT COMMISSION
In cooperation with the U.S. Department of Labor
Bureau of Labor Statistics and the Employment
and Training Administration

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TEXAS OCCUPATIONAL EMPLOYMENT STATISTICS

INDUSTRY STAFFING PATTERNS FOR SELECTED MANUFACTURING INDUSTRIES

2nd QUARTER 1977

Prepared by
Texas Employment Commission
Economic Research and Analysis
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PREFACE

We would like to express our appreciation to all the employers who willingly contributed their time and effort in completing and submitting the questionnaires as we requested. Their cooperation is what made this report possible. The statistical data contained in this report was compiled from the information received from employers' responses. To each of these respondents we extend a sincere thank you.

Another contribution that we feel was invaluable to our endeavor was made by the staff of the U. S. Department of Labor and the Bureau of Labor Statistics Regional Office in Dallas.

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INTRODUCTION

The Occupational Employment Statistics (OES) Program is a part of a Federal-State Cooperative Program involving State Employment Security Agencies in conjunction with the Employment Training Administration and the Bureau of Labor Statistics.

The OES Program is designed to: (1) provide accurate profiles of occupational resources by industry and trends in the number of workers employed by occupation, (2) aid in projections of future manpower requirements by industry and occupation, and (3) identify emerging and disappearing occupations. This information will help in the development of educational and training programs and will also provide valuable information for employment counselors and manpower planners. Data is generated to show the occupational profile of selected industry groups so that individual firms will be able to compare their occupational staffing patterns to that of the industry of which they are a part. This data will later be used to refine and modify the worker-demand projections generated through the occupation-by-industry Matrix Program.

This report represents Manufacturing data collected during the survey period. All respondents were requested to include employment data for the appropriate survey month--April 12, May 12, or June 12 of 1977.

This publication, and others of its type to follow, will be continually updated, as well as improved, to provide a better basis for decision-making at all levels of manpower and vocational planning.

METHODOLOGY

The Sample

The Second Quarter 1977 Report of Employment, Wages and Contributions Covered by the Texas Unemployment Compensation Act was used as a sampling frame for the Occupational Employment Statistics Survey of Manufacturing Establishments.

The sampling frame was stratified by three-digit (in some cases two-digit) SIC (Standard Industrial Classification) codes and by nine employment size groups and was then collapsed to six classes of employment: 4-9, 10-19, 20-49, 50-99, 100-249, and 250 plus. Establishments with over 250 employment were automatically included in a separate size class and were picked with certainty. All other establishments were subject to sample selection on a random basis, with the units in larger size classes having a proportionately higher chance of selection. A minimum of two units was allocated to each size class unless there was only one unit in the size class. Each unit was given a weight according to the proportion of firms selected in each size class. The sample included 8,741 establishments with a represented benchmark employment of 826,744.

Sampling Error

The sampling error is an arithmetic measure of the precision of the estimate. It can be considered as the difference between the estimate computed from the sample and the results that would have been obtained if the same methods were used to collect identical information from the universe (all available establishments). The relative errors listed in this report are the absolute sampling errors of each occupation expressed as a percent of that occupational estimate. This measure of precision is on the same base, a percentage comparison. The relative errors shown in this report are such that the chances are two out of three (68 percent) that the results of such a complete survey of all firms would not differ by plus or minus one relative standard error from the OES occupational estimates, and an interval of two relative standard errors will yield a 95 percent confidence level. For example, the OES estimate of employment in the Food and Kindred Products Industry (SIC 20) for the number of Drier Operators employed was 190 with a relative standard error of 7.43 percent. The chances are two out of three that the true number of workers employed in that occupation at the time of the survey was between 176 and 204 ($190 \pm .0743 \times 190$), and we may be 95 percent certain that the true number fell between 162 and 218 ($190 \pm 2 \times .0743 \times 190$). The relative standard error allows the user to judge, with a given degree of confidence, the quality of any particular occupational estimate. It is a measure of the relative dispersion within the data collected, and indicates the occupational coefficient of variation of the population from which the sample was drawn.

Nonsampling Error

A survey of this magnitude is going to have a small degree of nonsampling error. Examples of these errors are faulty questionnaire design, inaccuracy of data furnished, ineffective processing, and nonresponse. The possibility of errors in the design of and the data furnished by the questionnaires, as well as errors in processing, was recognized from the start of the survey. Every effort was exercised to avoid and control them. The nonresponse area was handled to a large degree by the built-in variables of the sampling and estimating process. This process takes into consideration that the occupational distribution of the nonreporting sample unit in a given three-digit employment size class is the same as among the reporting establishments of that size class.

Estimating Procedure

A ratio method, an established statistical procedure, was used throughout the report. Any given size class of any given industry represents an estimating cell. All establishments in a given cell are assigned a sample weight which is the inverse of the sampling ratio. There is a direct relationship between employment and the number of units within a size class to determine the ratio, or the probability of a sample selection. The employment for any specific occupation in each establishment is inflated by its sample weight and summed for all sample establishments in the cell. A ratio is then derived of the weighted employment for each occupation to the weighted reported total employment. This ratio is then multiplied by the benchmark employment for that estimating cell as of the appropriate survey month--April 12, May 12, or June 12 of 1977, thus yielding the occupational make-up of the estimating cell for that date. Like occupational employments are summed across all employment size classes within each three-digit SIC to arrive at a total industry employment for each occupation. Two-digit estimates of occupational employment were derived by summing estimates across three-digit SIC industries.

Collection Procedures

The majority of the data was collected by mail. Survey operations included an initial mail out and two follow-ups to nonrespondents (in some cases three, where nonresponse was a critical factor). The telephone was used extensively to clarify information, handle critical nonresponse areas, and prompt small and medium-sized respondents to furnish survey data.

CONSIDERATIONS OF THE USES OF THE ESTIMATES

Relative Error

Relative error is a measure of precision and expresses the absolute sampling error of an estimate as a percentage of that estimate. From an accuracy standpoint, the higher the relative error - the less accurate the estimate. If relative errors exceeded fifty percent, the employment from these occupations was merged with the employment of the "all other" residual category that was relevant to them.

Throughout the tables, it should be noted that the relative error is computed only for specific occupations and not for residual categories nor for occupational groupings. These are noted by "na" (not applicable).

Rounding Errors and Occupations With Employment Less Than Thirty

All percentage estimates were carried out to two decimal places with the exception of the percent of establishments reporting the occupation. These percentages were rounded to the nearest whole number.

In each SIC (Standard Industrial Classification), many more occupations were surveyed than are actually shown in the tables. Occupations which had employment of less than thirty were suppressed, and their employment was added to the residual category for their major occupational group.

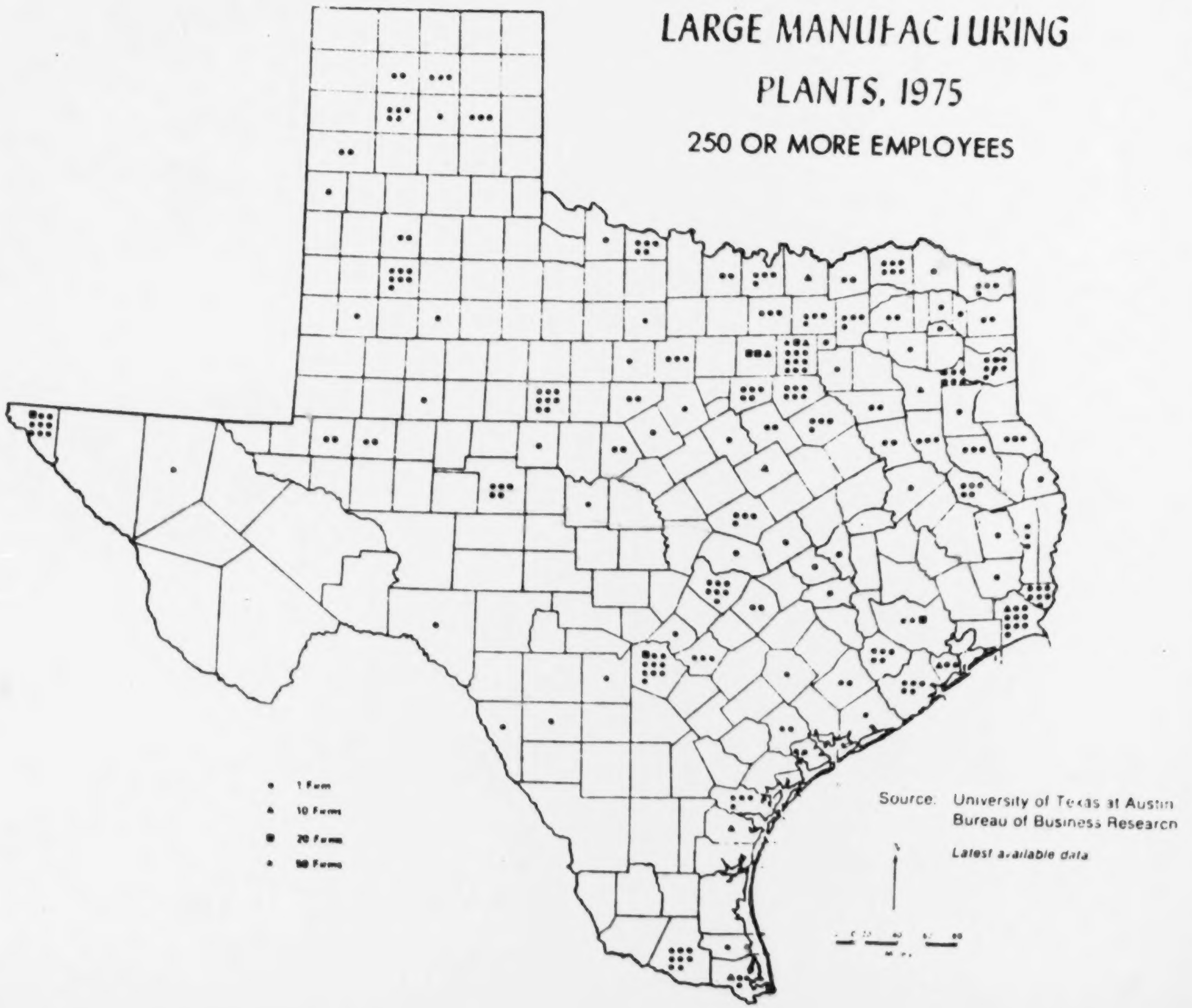
Industrial Classification With Statewide Employment of Less Than Three Thousand and Area Employment of Less Than One Thousand

Some of the industry groups surveyed had an insignificant amount of estimated employment--statewide less than three thousand, and areas less than one thousand. In order for the user to have meaningful occupational staffing patterns, the industry was suppressed or collapsed to the major two-digit industry group totals.

STAFFING PATTERNS
FOR
SELECTED INDUSTRIES

LARGE MANUFACTURING PLANTS, 1975

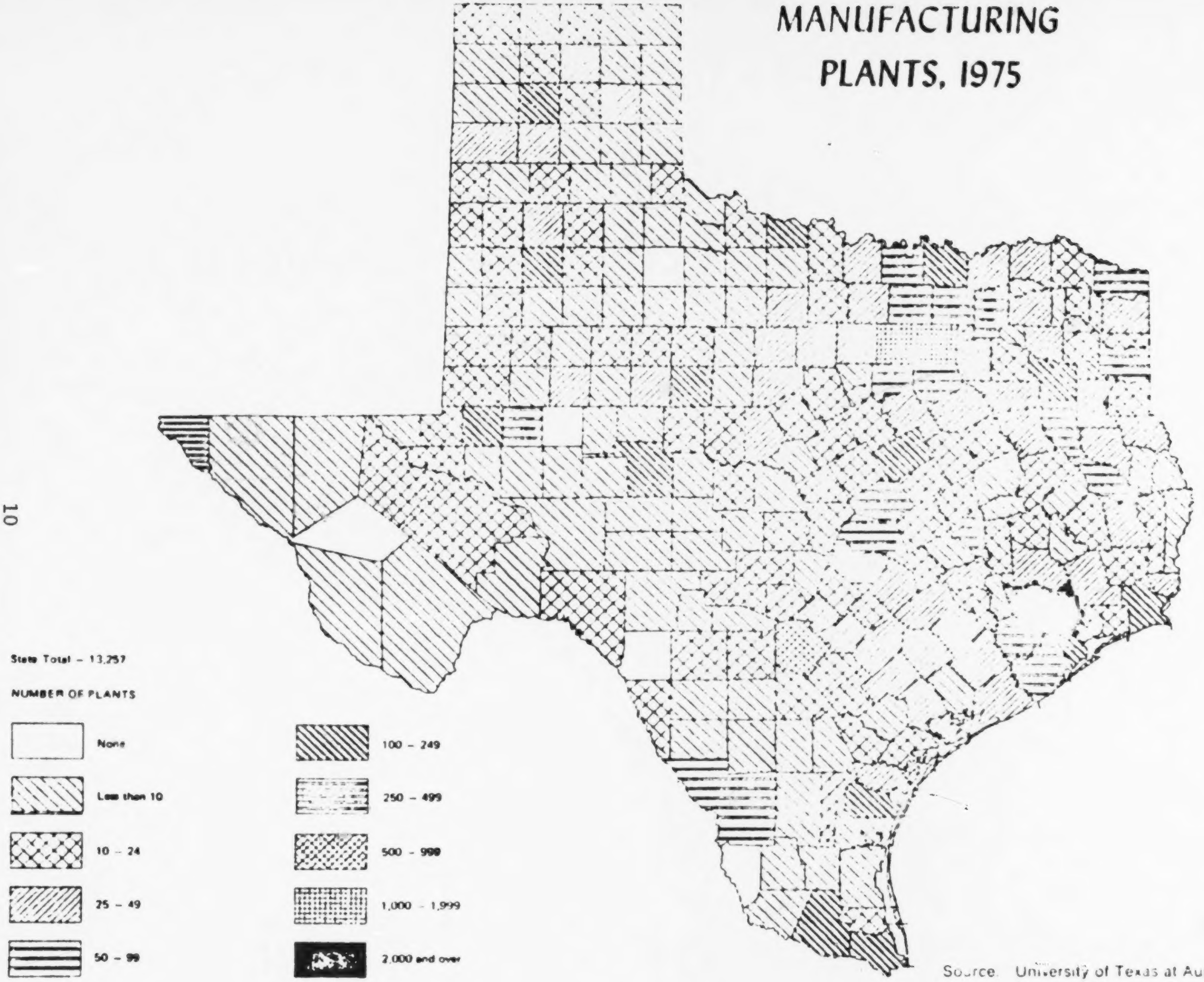
250 OR MORE EMPLOYEES


● 1 Firm
▲ 10 Firms
■ 20 Firms
● 50 Firms

Source: University of Texas at Austin
Bureau of Business Research

Latest available data

MANUFACTURING PLANTS, 1975


State Total – 13,257
NUMBER OF PLANTS
None
Less than 10
10 – 24
25 – 49
50 – 99
100 – 249
250 – 499
500 – 999
1,000 – 1,999
2,000 and over

Source: University of Texas at Austin
Bureau of Business Research

Latest available data

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INDUSTRY CHARACTERISTICS

Texas manufacturing has undergone major changes in the 1970's. For many decades Texas industry was concerned mainly with processing the raw materials produced in Texas and the Southwest--petroleum, other minerals, and agricultural products. While those activities are still important, the new direction of the Texas economy is toward diversification. New factories are turning out hundreds of products never made in this region until recent years, products previously shipped into Texas from other parts of the country. Many of these goods are marketed nationwide and even exported to other countries. A sample of the wide range of products now made in Texas would include such diverse items as electronic wrist watches, automobile radios, drugs and cosmetics, plastic packaging materials, and recreational boats.

The late seventies brought Texas a wave of industrial expansion tempered by uncertainty. The recession of the mid-seventies was past, but industrial employment remained a problem in some cities, though less in Texas than in much of the nation. More critical to Texas was the shortage of petroleum which threatened the economic status of some of the State's major manufacturers--petroleum refining, petrochemical production, and primary metal smelting.

Even though some of Texas' fastest growing industrial centers are not among the very largest cities, most manufacturing plants are located in the State's 25 SMSA's, which include cities with a population of 50,000 or more. The most populous SMSA in Texas, the Dallas-Fort Worth Area, has the largest number of manufacturing plants. The Houston SMSA is second. Twenty-nine percent of the States manufacturing workers are employed in the Dallas-Fort Worth Area and approximately 20 percent in the Houston Area. The San Antonio and Beaumont-Port Arthur Areas have approximately the same employment distribution--5 percent. Of the smaller manufacturing centers, the Longview Area is one that has expanded its industrial base more rapidly than any other in recent years. Austin, not an important manufacturing city in the past, has also attracted many new factories.

SIC 20
FOOD AND KINDRED PRODUCTS

Apart from Machinery Manufacturing, Food Processing employs more Texans than any other industry with a total employment of approximately 97,000 (June 1977) distributed among 16,500 plants. From a dollar standpoint, the most valuable output is meat products, accounting for more than a quarter of the total output and 26 percent of the Food Industry employment. Bottled and canned beverages, bakery goods, and dairy products also contribute heavily to the total production, but these are mainly for local or regional use. Texas also has a strong national market for canned, frozen, and specialty foods including seafoods and Mexican foods.

Seventy-five percent of the occupational employment, as noted in the table, is concentrated in Production, Maintenance, Repair, Material Handling, and Power Plant Occupations.

The Food Industry will always represent a major portion of our Texas economy. Employment is expected to continue to maintain moderate growth.

Average Annual Employment for Food and Kindred Products*

1975	88,800
1976	92,400
1977	94,100

*Source: Current Employment Statistics Program.

Table 1
SIC 20
Food and Kindred Products
Statewide

This major group includes establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	96,570	100.00	na	na
MANAGERS AND OFFICERS	6,170	6.39	3.54	90
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	1,560	1.61	na	na
Accountants and Auditors	560	.57	7.08	28
Biological Science Technicians	280	.29	11.29	8
Chemists	150	.15	9.17	6
Industrial Engineers	70	.06	16.08	3
Purchasing Agents and/or Buyers	250	.25	10.39	11
All Other Professional Workers	110	.11	na	na
All Other Technical Workers	140	.15	na	na
SERVICE OCCUPATIONS, TOTAL	4,060	4.21	na	na
Guards and Doorkeepers	180	.19	10.95	6
Janitors, Porters, and Cleaners	3,520	3.65	3.18	54
All Other Service Workers	360	.37	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	72,090	74.66	na	na
Supervisors, Nonworking	3,530	3.65	3.14	48
Baker Helpers	920	.94	10.24	6
Bakers	270	.27	33.84	5
Blanching Machine Operators	70	.06	15.08	2
Boners, Meat	1,260	1.30	14.43	9
Butchers, All-Around	2,900	3.00	13.85	11
Candy Makers	140	.14	3.45	4

Table 1 (Continued) Food and Kindred Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Cannery Workers................	3,120	3.23	4.78	4
Carcass Splitters..............	270	.27	14.27	8
Casing Finishers and/or Stuffers	600	.61	23.23	6
Cheesemakers...................	80	.08	15.27	2
Chicken Cutters................	360	.37	36.75	2
Coin Machine Servicers and/or Vending Machine Repairers.....	420	.43	9.13	9
Cooks and/or Cookers...........	1,150	1.19	8.55	20
Cooler Room Workers, Meat.......	960	.99	15.46	9
Cutting Machine Operators, Food.	950	.98	11.78	16
Dairy Processing Equipment Operators....................	250	.25	11.25	6
Delivery and Route Workers......	8,730	9.04	4.04	45
Depositors, Food...............	480	.49	32.31	6
Dividing Machine Operators and/or Dough-Brake Machine Operators....................	460	.47	15.82	5
Drier Operators................	190	.19	7.43	3
Electricians...................	240	.24	7.22	6
Extractor Operators and/or Extractor Plant Operators.....	110	.11	18.97	2
Farm Equipment Operators........	100	.10	16.38	1
Feed Pellet Mill Operators......	220	.22	17.06	6
Fermentation Operators..........	80	.08	6.42	1
Flavor Room Workers and/or Freezer Operators............	200	.20	14.00	4
Food Shapers, Hand.............	270	.27	24.75	5
Graders, Food and/or Skins......	320	.32	36.22	6
Helpers, Trades................	1,060	1.10	11.10	10
Industrial Truck Operators......	2,510	2.60	2.98	35
Inspectors.....................	880	.91	5.28	14
Machinists.....................	230	.23	12.06	7
Maintenance Repairers, General Utility......................	2,560	2.64	4.40	45
Meat Grinders..................	290	.30	11.73	8
Mechanics, Automotive...........	860	.89	5.96	23
Mechanics, Maintenance..........	1,620	1.67	5.58	28
Millers........................	400	.40	11.22	10
Millwrights....................	70	.07	5.72	1
Mixers, Food...................	2,310	2.39	6.18	49
Order Fillers..................	1,820	1.88	5.83	28

Table 1 (Continued) Food and Kindred Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Oven Operators	340	.34	15.67	6
Picklers, Food	120	.12	25.42	3
Poultry Dressers and/or Eviscerators	4,020	4.16	18.35	3
Production Packagers, Hand or Machine	13,260	13.74	3.39	64
Pumpers	100	.09	16.20	3
Refinery Operators	150	.15	32.55	1
Retort Operators	100	.10	29.40	2
Shellfish Processing Machine Tenders	120	.12	0.00	1
Skin Peeling Machine Operators	90	.09	24.30	4
Skinners, Animal	710	.73	15.07	9
Smokers	160	.16	20.95	5
Stunners	170	.17	15.91	8
Testers	530	.54	7.96	16
Truck Drivers	3,420	3.53	5.05	49
Washers and/or Separators, Food	550	.56	42.79	10
All Other Skilled Craftsmen and Kindred Workers	230	.24	na	na
All Other Operatives and Semi-skilled Workers	1,540	1.60	na	na
All Other Laborers and Unskilled Workers	3,220	3.33	na	na
CLERICAL OCCUPATIONS, TOTAL	9,460	9.78	na	na
Accounting Clerks	1,330	1.37	4.44	42
Bookkeepers, Hand	730	.75	8.46	31
General Clerks, Office	2,080	2.15	4.16	55
Keypunch Operators	100	.09	9.62	4
Order Clerks	150	.15	16.32	7
Production Clerks and/or Coordinators	130	.13	21.14	2
Secretaries	1,210	1.25	5.81	47
Shipping and/or Receiving Clerks	1,020	1.05	7.12	37
Shipping Packers	1,840	1.91	8.19	23
Stock Clerks-Stockroom, Warehouse, or Storage Yard	440	.45	9.52	15
Typists	70	.07	29.50	4
Weighers, Record-Keeping	100	.09	21.15	5
All Other Office Clerical Workers	210	.22	na	na
All Other Plant Clerical Workers	50	.05	na	na

Table 1 (Continued) Food and Kindred Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL.........	3,230	3.34	na	na
Sales Clerks....................	650	.67	10.69	13
Sales Representatives, Sales Agents, and/or Sales Associates...................	2,580	2.67	7.31	45

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	90
Production Packagers, Hand or Machine................	64
General Clerks, Office...............................	55
Janitors, Porters, and Cleaners......................	54
Mixers, Food...	49
Truck Drivers..	49

Table 2
SIC 20
Food and Kindred Products
Dallas-Fort Worth SMSA

This major group includes establishments manufacturing or processing foods and beverages for human consumption; and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	23,100	100.00	na	na
MANAGERS AND OFFICERS.............	1,860	8.05	9.81	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	480	2.07	na	na
Accountants and Auditors........	180	.79	13.19	33
Biological Science Technicians..	90	.39	12.84	12
Chemists.......................	70	.29	5.95	9
Purchasing Agents and/or Buyers.	40	.16	20.89	15
All Other Professional Workers..	50	.20	na	na
All Other Technical Workers.....	50	.23	na	na
SERVICE OCCUPATIONS, TOTAL........	820	3.51	na	na
Janitors, Porters, and Cleaners.	740	3.18	6.00	61
All Other Service Workers.......	80	.33	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	16,420	71.21	na	na
Supervisors, Nonworking.........	850	3.70	8.71	50
Baker Helpers...................	270	1.17	21.29	7
Bakers..........................	40	.15	30.49	4
Boners, Meat....................	180	.75	31.69	11
Butchers, All-Around............	340	1.46	33.28	12
Candy Makers....................	30	.14	10.84	6
Cannery Workers.................	180	.77	47.61	4
Coin Machine Servicers and/or Vending Machine Repairers.....	60	.25	12.51	5
Cooks and/or Cookers............	340	1.47	8.70	23

Table 2 (Continued) Food and Kindred Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Cooler Room Workers, Meat.......	160	.68	47.17	12
Cutting Machine Operators, Food.	230	1.00	19.64	18
Dairy Processing Equipment Operators....................	40	.17	45.08	7
Delivery and Route Workers......	1,950	8.46	12.63	42
Depositors, Food................	70	.29	13.36	7
Dividing Machine Operators and/or Dough-Brake Machine Operators....................	70	.30	4.95	4
Electricians....................	50	.20	14.86	4
Food Shapers, Hand..............	30	.13	17.86	4
Graders, Food and/or Skins......	30	.14	33.55	6
Helpers, Trades.................	100	.41	21.38	6
Industrial Truck Operators......	830	3.61	6.32	37
Inspectors......................	180	.77	14.94	17
Machinists......................	40	.15	28.39	6
Maintenance Repairers, General Utility......................	570	2.47	8.16	48
Meat Grinders...................	50	.22	33.76	9
Mechanics, Automotive...........	190	.83	15.44	18
Mechanics, Maintenance..........	440	1.90	13.07	29
Millers.........................	40	.19	49.70	6
Mixers, Food....................	480	2.09	10.95	50
Order Fillers...................	520	2.25	12.26	32
Oven Operators..................	70	.29	2.93	5
Picklers, Food..................	60	.27	47.84	5
Production Packagers, Hand or Machine......................	4,360	18.89	5.33	68
Pumpers.........................	30	.13	36.24	4
Skinners, Animal................	90	.40	45.29	10
Stunners........................	50	.20	38.28	9
Testers.........................	160	.68	10.82	17
Truck Drivers...................	770	3.33	12.86	44
Washers and/or Separators, Food.	110	.48	19.48	10
All Other Operatives and Semi-skilled Workers...............	1,460	6.34	na	na
All Other Laborers and Unskilled Workers......................	900	3.92	na	na

Table 2 (Continued) Food and Kindred Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	2,530	10.90	na	na
Accounting Clerks...............	350	1.51	11.91	44
Bookkeepers, Hand...............	150	.64	26.19	28
General Clerks, Office..........	580	2.51	9.45	54
Order Clerks....................	40	.18	12.24	13
Production Clerks and/or Coordinators.................	60	.25	8.47	4
Secretaries.....................	360	1.54	14.19	53
Shipping and/or Receiving Clerks	210	.91	17.81	43
Shipping Packers................	520	2.24	17.12	32
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	120	.50	23.68	15
All Other Clerical Workers......	140	.59	na	na
SALES OCCUPATIONS, TOTAL..........	990	4.26	na	na
Sales Clerks....................	200	.84	22.37	15
Sales Representatives, Sales Agents, and/or Sales Associates..................	790	3.41	13.57	50

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	93
Production Packagers, Hand or Machine................	68
Janitors, Porters, and Cleaners......................	61
General Clerks, Office...............................	54
Secretaries..	53

Table 3
SIC 20
Food and Kindred Products
Houston SMSA

This major group includes establishments manufacturing or processing foods and beverages for human consumption; and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	13,940	100.00	na	na
MANAGERS AND OFFICERS	1,000	7.16	5.48	89
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	290	2.12	na	na
Accountants and Auditors	120	.88	6.74	43
Biological Science Technicians	30	.22	18.52	8
Chemists	30	.21	32.37	8
Industrial Engineers	30	.22	30.53	6
Purchasing Agents and/or Buyers	50	.37	18.34	13
All Other Professional and Technical Workers	30	.20	na	na
SERVICE OCCUPATIONS, TOTAL	800	5.72	na	na
Food Service Workers	70	.49	23.62	5
Janitors, Porters, and Cleaners	700	5.04	7.51	54
All Other Service Workers	30	.18	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	9,890	70.91	na	na
Supervisors, Nonworking	640	4.57	4.17	48
Baker Helpers	100	.74	14.95	8
Bakers	70	.51	26.46	10
Boners, Meat	40	.26	40.28	8
Butchers, All-Around	90	.62	32.12	13
Casing Finishers and/or Stuffers	30	.23	39.07	10
Coin Machine Servicers and/or Vending Machine Repairers	50	.32	7.09	8

Table 3 (Continued) Food and Kindred Products, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Cooks and/or Cookers	170	1.19	20.23	24
Cooler Room Workers, Meat	50	.32	31.18	5
Cutting Machine Operators, Food	80	.53	10.51	17
Delivery and Route Workers	1,390	10.03	8.62	41
Depositors, Food	50	.34	39.33	10
Dividing Machine Operators and/or Dough-Brake Machine Operators	170	1.24	7.47	11
Drier Operators	150	1.05	5.19	11
Electricians	70	.46	5.01	13
Food Shapers, Hand	50	.32	47.57	8
Helpers, Trades	500	3.59	16.12	16
Industrial Truck Operators	450	3.26	3.05	35
Inspectors	110	.76	7.35	14
Machinists	50	.33	10.34	10
Maintenance Repairers, General Utility	290	2.06	7.88	40
Mechanics, Automotive	170	1.23	12.86	33
Mechanics, Maintenance	240	1.70	4.95	27
Millers	60	.42	38.78	8
Mixers, Food	340	2.45	12.16	49
Order Fillers	350	2.54	14.97	38
Oven Operators	50	.38	18.90	10
Production Packagers, Hand or Machine	1,960	14.09	8.33	60
Skinners, Animal	40	.31	43.80	8
Testers	100	.74	5.49	17
Truck Drivers	510	3.66	8.36	40
Washers and/or Separators, Food	90	.64	26.70	10
All Other Skilled Craftsmen and Kindred Workers	130	.93	na	na
All Other Operatives and Semiskilled Workers	730	5.23	na	na
All Other Laborers and Unskilled Workers	520	3.73	na	na
CLERICAL OCCUPATIONS, TOTAL	1,500	10.77	na	na
Accounting Clerks	210	1.48	5.49	38
Bookkeepers, Hand	170	1.20	13.78	25
General Clerks, Office	410	2.93	6.49	57

Table 3 (Continued) Food and Kindred Products, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Keypunch Operators..............	40	.30	4.47	8
Order Clerks....................	40	.28	21.39	8
Secretaries.....................	260	1.87	6.62	56
Shipping and/or Receiving Clerks	170	1.21	17.28	41
Shipping Packers................	90	.65	27.52	16
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	50	.36	22.93	19
All Other Office Clerical Workers......................	30	.22	na	na
All Other Plant Clerical Workers	30	.23	na	na
SALES OCCUPATIONS, TOTAL..........	460	3.31	na	na
Sales Clerks....................	90	.66	25.76	10
Sales Representatives, Sales Agents, and/or Sales Associates....................	370	2.64	20.53	40

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	89
Production Packagers, Hand or Machine...............	60
General Clerks, Office.............................	57
Secretaries..	56
Janitors, Porters, and Cleaners....................	54

Table 4
SIC 20
Food and Kindred Products
El Paso SMSA

This major group includes establishments manufacturing or processing foods and beverages for human consumption; and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	3,380	100.00	na	na
MANAGERS AND OFFICERS	170	5.04	4.14	80
PROFESSIONAL AND TECHNICAL OCCUPATIONS	[2]			
SERVICE OCCUPATIONS, TOTAL	70	1.92	na	na
Janitors, Porters, and Cleaners	70	1.92	6.71	37
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTA	2,800	82.73	na	na
Supervisors, Nonworking	70	2.04	7.45	34
Boners, Meat	90	2.66	0.00	11
Butchers, All-Around	180	5.42	0.00	14
Cooks and/or Cookers	100	3.05	6.53	34
Delivery and Route Workers	300	8.74	4.74	63
Helpers, Trades	30	.94	24.16	9
Industrial Truck Operators	70	2.01	6.52	26
Maintenance Repairers, General Utility	70	2.01	1.27	31
Mechanics, Automotive	30	.88	5.37	11
Mechanics, Maintenance	60	1.83	4.45	26
Mixers, Food	80	2.31	7.76	57
Order Fillers	70	1.98	8.49	26
Production Packagers, Hand or Machine	450	13.37	3.73	71
Truck Drivers	160	4.83	.41	20

Table 4 (Continued) Food and Kindred Products, El Paso SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
All Other Skilled Craftsmen and Kindred Workers..............	50	1.36	na	na
All Other Operatives and Semi-skilled Workers..............	890	26.21	na	na
All Other Laborers and Unskilled Workers......................	100	3.05	na	na
CLERICAL OCCUPATIONS, TOTAL.......	180	5.30	na	na
General Clerks, Office..........	80	2.34	5.22	34
All Other Clerical Workers......	100	2.96	na	na
SALES OCCUPATIONS, TOTAL..........	150	4.30	na	na
Sales Clerks....................	40	1.12	29.64	17
Sales Representatives, Sales Agents, and/or Sales Associates...................	110	3.17	4.08	43

1/ Based on unrounded data.

2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers...............................	80
Production Packagers, Hand or Machine................	71
Delivery and Route Workers...........................	63
Mixers, Food...	57

Table 5
SIC 202
Dairy Products
Statewide

This group includes establishments primarily engaged in the manufacturing of creamery butter; natural cheese; condensed and evaporated milk; ice cream and frozen desserts; and special dairy products, such as processed cheese and malted milk. This industry also includes processing (pasteurizing, homogenizing, vitaminizing, bottling) fluid milk and cream for wholesale or retail distribution.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	6,710	100.00	na	na
MANAGERS AND OFFICERS.............	470	6.96	18.32	84
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	50	.69	na	na
Accountants and Auditors........	30	.47	28.53	33
All Other Professional and Technical Workers.............	2/			
SERVICE OCCUPATIONS, TOTAL........	140	2.04	na	na
Food Service Workers............	30	.49	49.40	5
Janitors, Porters, and Cleaners.	100	1.52	25.96	49
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	4,940	73.68	na	na
Supervisors, Nonworking.........	220	3.29	18.73	44
Cheesemakers....................	80	1.19	15.27	18
Dairy Processing Equipment Operators....................	230	3.38	11.55	58
Delivery and Route Workers......	1,860	27.69	11.27	84
Flavor Room Workers and/or Freezer Operators............	200	2.95	14.00	33
Industrial Truck Operators......	30	.47	19.90	25
Maintenance Repairers, General Utility......................	180	2.65	15.21	61
Mechanics, Automotive...........	180	2.69	17.68	47

Table 5 (Continued) Dairy Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Mechanics, Maintenance..........	120	1.77	36.85	35
Mixers, Food....................	120	1.73	35.31	42
Order Fillers...................	410	6.12	12.62	51
Production Packagers, Hand or Machine......................	700	10.46	20.00	63
Testers.........................	80	1.20	12.99	60
Truck Drivers...................	230	3.47	8.83	56
All Other Operatives and Semi-skilled Workers...............	150	2.24	na	na
All Other Laborers and Unskilled Workers......................	150	2.22	na	na
CLERICAL OCCUPATIONS, TOTAL.......	790	11.84	na	na
Accounting Clerks...............	140	2.14	10.32	58
Bookkeepers, Hand...............	60	.82	17.34	35
General Clerks, Office..........	260	3.87	9.50	70
Secretaries.....................	70	.99	18.25	54
Shipping and/or Receiving Clerks	260	3.87	13.99	67
SALES OCCUPATIONS, TOTAL..........	320	4.79	na	na
Sales Clerks....................	60	.87	20.23	9
Sales Representatives, Sales Agents, and/or Sales Associates...................	260	3.90	11.59	61

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Delivery and Route Workers..........................	84
Managers and Officers...............................	84
General Clerks, Office..............................	70
Shipping and/or Receiving Clerks....................	67
Production Packagers, Hand or Machine...............	63

Table 6
SIC 203
Canned and Preserved Fruits and Vegetables
Statewide

This group includes establishments primarily engaged in canning, dehydrating, pickling, freezing, and/or packing of: specialty products; fruits, vegetables, preserves, jams, and jellies; seasonings and salad dressings; and frozen specialties.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	9,380	100.00	na	na
MANAGERS AND OFFICERS.............	510	5.43	25.54	94
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	140	1.39	na	na
Accountants and Auditors........	70	.71	14.25	39
Biological Science Technicians..	40	.40	14.90	14
All Other Professional and Technical Workers............	30	.27	na	na
SERVICE OCCUPATIONS, TOTAL........	450	4.81	na	na
Janitors, Porters, and Cleaners.	430	4.62	7.70	58
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	7,020	74.94	na	na
Supervisors, Nonworking.........	310	3.26	12.87	61
Blanching Machine Operators.....	70	.69	15.08	28
Cannery Workers.................	3,090	33.10	4.78	61
Cooks and/or Cookers............	220	2.33	5.58	42
Cutting Machine Operators, Food.	40	.44	39.55	19
Extractor Operators and/or Extractor Plant Operators.....	40	.46	25.26	14
Farm Equipment Operators........	50	.54	26.52	8
Graders, Food and/or Skins......	90	.97	20.99	19
Industrial Truck Operators......	440	4.69	9.16	56
Inspectors......................	140	1.47	11.60	42
Maintenance Repairers, General Utility......................	190	2.06	5.27	50
Mechanics, Maintenance..........	320	3.41	10.55	50
Mixers, Food....................	140	1.44	11.39	58
Picklers, Food..................	90	.95	33.50	11

Table 6 (Continued) Canned and Preserved Fruits and Vegetables, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Production Packagers, Hand or Machine......................	820	8.76	14.00	72
Retort Operators...............	100	1.10	29.40	31
Testers........................	90	.98	15.38	25
Truck Drivers..................	340	3.60	25.82	50
Washers and/or Separators, Food.	60	.65	28.39	14
All Other Skilled Craftsmen and Kindred Workers...............	40	.40	na	na
All Other Operatives and Semi-skilled Workers...............	220	2.31	na	na
All Other Laborers and Unskilled Workers......................	120	1.30	na	na
CLERICAL OCCUPATIONS, TOTAL.......	1,140	12.15	na	na
Accounting Clerks..............	100	1.05	5.10	47
Bookkeepers, Hand..............	80	.84	41.93	39
General Clerks, Office..........	250	2.69	17.36	67
Secretaries....................	150	1.56	26.81	61
Shipping Packers...............	440	4.66	17.32	56
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	90	.99	26.93	56
All Other Office Clerical Workers......................	30	.33	na	na
SALES OCCUPATIONS, TOTAL..........	120	1.27	na	na
Sales Representatives, Sales Agents, and/or Sales Associates..................	120	1.27	31.50	42

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	94
Production Packagers, Hand or Machine................	72
General Clerks, Office...............................	67
Cannery Workers......................................	61
Secretaries..	61
Supervisors, Nonworking..............................	61

Table 7
SIC 205
Bakery Products
Statewide

This group includes establishments primarily engaged in the manufacturing of bread, cakes, and other "perishable" bakery products. Also included in this group are establishments primarily engaged in manufacturing cookies, crackers, pretzels, and similar "dry" bakery products.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	10,950	100.00	na	na
MANAGERS AND OFFICERS.............	430	3.95	12.05	87
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	60	.52	na	na
Accountants and Auditors........	40	.33	28.81	20
All Other Professional and Technical Workers.............	2/			
SERVICE OCCUPATIONS, TOTAL........	1,010	9.23	na	na
Janitors, Porters, and Cleaners.	770	7.06	5.88	82
All Other Service Workers.......	240	2.18	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	8,160	74.49	na	na
Supervisors, Nonworking.........	400	3.65	6.87	51
Baker Helpers..................	920	8.37	10.24	69
Bakers.........................	270	2.46	33.84	60
Cutting Machine Operators, Food.	300	2.71	28.08	51
Delivery and Route Workers......	1,730	15.84	6.63	58
Depositors, Food................	160	1.43	18.93	36
Dividing Machine Operators and/or Dough-Brake Machine Operators.....................	460	4.23	15.82	64
Food Shapers, Hand..............	150	1.36	24.80	31
Ingredient Scalers..............	40	.37	15.48	22
Maintenance Repairers, General Utility......................	180	1.66	11.04	51
Mechanics, Automotive...........	140	1.28	13.73	47

Table 7 (Continued) Bakery Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Mechanics, Maintenance..........	190	1.70	8.27	36
Mixers, Food....................	490	4.49	9.90	73
Order Fillers...................	280	2.51	12.04	49
Oven Operators..................	340	3.06	15.67	76
Production Packagers, Hand or Machine......................	1,210	11.10	15.14	73
Truck Drivers...................	350	3.17	10.81	58
All Other Skilled Craftsmen and Kindred Workers...............	130	1.17	na	na
All Other Operatives and Semi-skilled Workers...............	50	.47	na	na
All Other Laborers and Unskilled Workers......................	370	3.40	na	na
CLERICAL OCCUPATIONS, TOTAL.......	740	6.79	na	na
General Clerks, Office..........	320	2.92	10.22	67
Secretaries.....................	60	.58	22.09	49
Shipping and/or Receiving Clerks	140	1.23	10.94	53
Shipping Packers................	160	1.49	15.63	31
All Other Clerical Workers......	60	.55	na	na
SALES OCCUPATIONS, TOTAL..........	550	5.01	na	na
Sales Clerks....................	380	3.42	13.59	44
Sales Representatives, Sales Agents, and/or Sales Associates....................	170	1.58	15.99	40

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	87
Janitors, Porters, and Cleaners....................	82
Oven Operators.....................................	76
Mixers, Food.......................................	73
Production Packagers, Hand or Machine..............	73

Table 8
SIC 208
Beverages
Statewide

This group includes establishments primarily engaged in manufacturing malt beverages; malt; wines, brandy, and brandy spirits; distilled, rectified, and blended liquors; bottled and canned soft drinks and carbonated waters; and flavoring extracts and syrups.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	16,920	100.00	na	na
MANAGERS AND OFFICERS.............	1,400	8.29	5.90	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	240	1.43	na	na
Accountants and Auditors........	110	.63	16.44	38
Biological Science Technicians..	50	.30	9.86	5
All Other Professional and Technical Workers............	80	.49	na	na
SERVICE OCCUPATIONS, TOTAL........	270	1.63	na	na
Janitors, Porters, and Cleaners.	220	1.30	10.92	59
All Other Service Workers.......	50	.32	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	12,720	75.22	na	na
Supervisors, Nonworking.........	770	4.55	6.06	58
Carbonation Equipment Tenders, Beer.........................	40	.21	43.16	7
Coin Machine Servicers and/or Vending Machine Repairers.....	420	2.48	9.13	65
Cooks and/or Cookers............	50	.26	17.30	5
Delivery and Route Workers......	3,600	21.32	5.61	76
Electricians....................	90	.52	8.79	7
Fermentation Operators..........	80	.46	6.42	4
Helpers, Trades.................	540	3.17	10.48	22
Industrial Truck Operators......	1,150	6.82	4.45	80
Inspectors......................	310	1.81	9.52	49

Table 8 (Continued) Beverages, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Machinists......................	70	.43	33.27	12
Maintenance Repairers, General Utility......................	320	1.91	10.68	41
Mechanics, Automotive..........	270	1.58	10.68	42
Mechanics, Maintenance.........	190	1.14	7.52	19
Mixers, Food...................	200	1.20	22.21	50
Order Fillers..................	250	1.47	20.60	27
Production Packagers, Hand or Machine......................	3,030	17.92	5.87	76
Testers........................	80	.44	8.61	27
Truck Drivers..................	290	1.73	11.55	55
All Other Skilled Craftsmen and Kindred Workers...............	40	.22	na	na
All Other Operatives and Semiskilled Workers...............	160	.97	na	na
All Other Laborers and Unskilled Workers......................	770	4.52	na	na
CLERICAL OCCUPATIONS, TOTAL.......	1,530	8.95	na	na
Accounting Clerks..............	290	1.74	7.89	58
Bookkeepers, Hand..............	140	.79	17.70	38
General Clerks, Office.........	280	1.66	8.69	62
Keypunch Operators.............	30	.20	10.64	11
Production Clerks and/or Coordinators.................	100	.56	28.02	8
Secretaries....................	260	1.53	8.02	58
Shipping and/or Receiving Clerks	200	1.16	16.05	51
Typists........................	70	.39	30.38	23
All Other Office Clerical Workers......................	80	.46	na	na
All Other Plant Clerical Workers	80	.44	na	na
SALES OCCUPATIONS, TOTAL..........	760	4.47	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	750	4.44	19.99	58
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 8 (Continued) Beverages, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	100
Industrial Truck Operators	80
Delivery and Route Workers	76
Production Packagers, Hand or Machine	76
Coin Machine Servicers and/or Vending Machine Repairers	65

Table 9
SIC 209
Miscellaneous Food Preparations and Kindred Products
Statewide

This group includes establishments primarily engaged in canning and curing fish and seafoods; preparing fresh and raw or cooked frozen packaged fish and other seafood, including soups; roasting coffee and manufacturing coffee concentrates and extracts; manufacturing ice; manufacturing dry macaronni, spaghetti, vermicelli, and noodles; and other food preparations, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	11,410	100.00	na	na
MANAGERS AND OFFICERS.............	1,030	9.05	5.93	84
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	190	1.74	na	na
Accountants and Auditors........	70	.62	19.51	16
Biological Science Technicians..	40	.34	19.74	8
All Other Professional Workers..	50	.47	na	na
All Other Technical Workers.....	30	.29	na	na
SERVICE OCCUPATIONS, TOTAL........	580	5.06	na	na
Janitors, Porters, and Cleaners.	540	4.72	5.75	43
All Other Service Workers.......	40	.34	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	8,180	71.78	na	na
Supervisors, Nonworking.........	270	2.33	7.47	28
Cooks and/or Cookers............	490	4.33	14.40	44
Cutting Machine Operators, Food.	70	.63	35.83	9
Delivery and Route Workers......	410	3.58	23.99	42
Drier Operators.................	90	.82	3.93	5
Electricians....................	30	.26	12.37	6
Helpers, Trades.................	170	1.47	45.96	9
Industrial Truck Operators......	260	2.31	8.15	23
Inspectors......................	210	1.87	5.80	9
Machinists......................	40	.30	25.30	9
Maintenance Repairers, General Utility......................	340	2.93	9.16	34

Table 9 (Continued) Miscellaneous Food Preparations and Kindred Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Mechanics, Automotive	50	.47	18.56	16
Mechanics, Maintenance	180	1.54	8.98	11
Millers	40	.35	26.20	10
Mixers, Food	350	3.08	18.04	47
Order Fillers	280	2.48	9.72	25
Production Packagers, Hand or Machine	2,970	26.06	5.26	76
Shellfish Processing Machine Tenders	120	1.01	0.00	3
Testers	160	1.39	12.05	8
Truck Drivers	380	3.30	14.72	33
All Other Skilled Craftsmen and Kindred Workers	40	.34	na	na
All Other Operatives and Semi-skilled Workers	750	6.61	na	na
All Other Laborers and Unskilled Workers	480	4.23	na	na
CLERICAL OCCUPATIONS, TOTAL	1,170	10.04	na	na
Accounting Clerks	150	1.29	10.04	30
Bookkeepers, Hand	90	.76	24.80	24
General Clerks, Office	250	2.16	10.22	42
Order Clerks	40	.30	34.40	14
Secretaries	190	1.64	8.99	36
Shipping Packers	210	1.80	26.28	19
Stock Clerks-Stockroom, Warehouse, or Storage Yard	100	.86	13.64	20
All Other Clerical Workers	140	1.19	na	na
SALES OCCUPATIONS, TOTAL	260	2.32	na	na
Sales Clerks	100	.91	38.23	19
Sales Representatives, Sales Agents, and/or Sales Associates	160	1.41	41.74	22

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[1] Based on unrounded data.

Table 9 (Continued) Miscellaneous Food Preparations and Kindred Products, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	84
Production Packagers, Hand or Machine	76
Mixers, Food	47
Cooks and/or Cookers	44
Janitors, Porters, and Cleaners	43

SIC 22
TEXTILE MILL PRODUCTS

The Textile Industry in Texas is not one of the State's largest industries. There are only 93 plants with a total of fewer than 7,000 workers (April 1977). Development of this industry has been inhibited by worldwide oversupply of textiles and intense competition.

The cotton fabric sector represents the largest portion of the total industry, with 62 percent of the employment concentrated among 16 plants.

As evidenced by the table, most occupations in the Textile Industry are machine operative jobs that can be learned on the job. Other occupations require additional training and special skills. A small share of the jobs is held by workers trained in professional fields.

The Textile Industry employment growth is expected to be slower than the average for all industries through the mid-1980's. Expansion of the industry will be mainly correlated to demand from the Apparel and Home Furnishing Industries. Other than moderate expansion, job openings will result from persons leaving the industry because of death, retirement, or for other reasons than employment growth.

Average Annual Employment in the Textile Mill Products Industry*

1975	6,900
1976	7,200
1977	7,100

*Source: Current Employment Statistics Program.

Table 10
SIC 22
Textile Mill Products
Statewide

This major group includes establishments engaged in performing any of the following operations: (1) preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broad woven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabric, and knit apparel; (4) coating, waterproofing, or otherwise treating fabric; (5) the intergrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	6,990	100.00	na	na
MANAGERS AND OFFICERS............	220	3.11	15.37	85
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	140	2.00	na	na
Accountants and Auditors........	50	.70	23.57	34
All Other Professional and Technical Workers............	90	1.30	na	na
SERVICE OCCUPATIONS, TOTAL........	140	2.04	na	na
Guards and Doorkeepers..........	60	.87	0.00	20
Janitors, Porters, and Cleaners.	70	1.06	23.60	37
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	6,070	86.86	na	na
Supervisors, Nonworking.........	240	3.49	15.43	51
Battery Loaders.................	100	1.49	29.03	10
Beam-Warper Tenders, Automatic and/or Beamers................	60	.86	12.46	20
Blending Machine Operators......	50	.74	20.40	20
Bobbin Sorters..................	30	.47	0.00	7
Card Tenders, Comber Tenders, and/or Card Strippers.........	120	1.69	8.84	22

Table 10 (Continued) Textile Mill Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Cloth Feeders and/or Back Tenders	30	.45	0.00	12
Cloth Finishing-Range Operators, Chief	40	.51	29.05	10
Cloth Finishing-Range Tenders, Middle	50	.76	40.18	10
Creelers, Yarn	140	2.03	16.88	20
Cutters, Machine	140	1.99	3.20	15
Doffers	190	2.72	4.19	20
Drawing-Frame Tenders and/or Gill-Box Tenders	90	1.35	10.61	17
Electricians	40	.54	7.92	22
Helpers, Trades	40	.53	9.22	15
Industrial Truck Operators	60	.89	11.55	32
Inspectors	190	2.77	15.05	27
Knitting Machine Operators	110	1.60	2.52	7
Loom Fixers	250	3.61	.97	15
Machinists	30	.47	1.89	12
Maintenance Repairers, General Utility	50	.71	23.58	34
Mechanics, Maintenance	50	.66	0.00	15
Oilers	50	.68	13.81	15
Opener Tenders and/or Waste Machine Tenders	30	.45	31.14	10
Picker Tenders	30	.44	25.83	12
Production Packagers, Hand or Machine	130	1.86	20.99	29
Section Repairers and Setters	210	3.00	8.95	15
Sewing Machine Operators, Regular Equipment-Garment	180	2.58	12.26	17
Sewing Machine Operators, Regular Equipment-Nongarment	170	2.37	35.32	22
Slasher Tenders	50	.67	11.12	10
Slubber Tenders	80	1.10	14.41	10
Smash Hands	70	.99	.90	12
Spinners, Frame	340	4.94	8.70	20
Testers	30	.44	21.05	20
Twister Tenders	40	.58	17.27	10
Warp-Tying Machine Tenders	50	.64	3.11	15
Weavers	420	6.09	9.55	20
Winder Operators, Automatic	120	1.75	21.08	17

Table 10 (Continued) Textile Mill Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Yarn Winders....................	80	1.20	36.31	10
All Other Mechanics and Repairers....................	50	.66	na	na
All Other Skilled Craftsmen and Kindred Workers..............	90	1.23	na	na
All Other Operatives and Semi-skilled Workers..............	1,020	14.59	na	na
All Other Laborers and Unskilled Workers.....................	730	10.40	na	na
CLERICAL OCCUPATIONS, TOTAL.......	350	4.94	na	na
General Clerks, Office..........	90	1.32	13.06	29
Secretaries....................	40	.57	14.41	39
Shipping Packers...............	30	.47	20.96	27
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	40	.53	6.49	12
All Other Office Clerical Workers......................	100	1.41	na	na
All Other Plant Clerical Workers	50	.64	na	na
SALES OCCUPATIONS, TOTAL..........	70	1.00	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	70	1.00	25.09	32

[1] Based on unrounded data.
[2] Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	85
Supervisors, Nonworking............................	51
Secretaries..	39
Janitors, Porters, and Cleaners....................	37

Table 11
SIC 22
Textile Mill Products
San Antonio SMSA

This major group includes establishments engaged in performing any of the following operations: (1) preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broad woven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabric, and knit apparel; (4) coating, waterproofing, or otherwise treating fabric; (5) the integrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,200	100.00	na	na
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	70	3.05	na	na
SERVICE OCCUPATIONS...............	40	1.59	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,970	88.77	na	na
Supervisors, Nonworking.........	80	3.68	0.00	80
Battery Loaders.................	40	1.72	0.00	40
Beam-Dyer Operators and/or Package-Dyeing Machine Operators.....................	40	1.81	0.00	20
Creelers, Yarn..................	30	1.54	0.00	20
Cutters, Machine................	80	3.73	0.00	40
Inspectors......................	110	4.91	0.00	60
Knitting Machine Operators......	60	2.72	0.00	20
Loom Fixers.....................	70	3.09	0.00	40
Production Packagers, Hand or Machine......................	30	1.41	0.00	60
Section Repairers and Setters...	50	2.09	0.00	20
Sewing Machine Operators, Regular Equipment-Garment.....	50	2.13	0.00	20
Slasher Tenders.................	40	1.72	0.00	40
Spinners, Frame.................	90	4.14	0.00	20
Spooler Operators, Automatic....	40	1.63	0.00	20

Table 11 (Continued) Textile Mill Products, San Antonio SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Weavers	130	5.95	0.00	40
Winder Operators, Automatic	30	1.50	0.00	20
All Other Mechanics and Repairers	50	2.09	na	na
All Other Skilled Craftsmen and Kindred Workers	60	2.68	na	na
All Other Operatives and Semi-skilled Workers	760	34.47	na	na
All Other Laborers and Unskilled Workers	130	5.68	na	na
CLERICAL OCCUPATIONS, TOTAL	120	5.55	na	na
General Clerks, Office	50	2.32	0.00	40
All Other Clerical Workers	70	3.23	na	na

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Supervisors, Nonworking	80
Inspectors	60
Production Packagers, Hand or Machine	60

Table 12
SIC 221
Broad Woven Fabric Mills, Cotton
Statewide

This group includes establishments primarily engaged in weaving fabrics over twelve inches in width, wholly or chiefly by weight of cotton.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	4,340	100.00	na	na
MANAGERS AND OFFICERS	30	.71	0.00	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS	90	2.13	na	na
SERVICE OCCUPATIONS, TOTAL	100	2.24	na	na
Guards and Doorkeepers	50	1.09	0.00	67
Janitors, Porters, and Cleaners	50	1.09	36.82	67
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,930	90.60	na	na
Supervisors, Nonworking	150	3.38	24.54	50
Battery Loaders	90	2.06	33.92	50
Beam-Dyer Operators and/or Package-Dyeing Machine Operators	40	.92	0.00	17
Beam-Warper Tenders, Automatic, and/or Beamers	40	.92	6.01	67
Bobbin Sorters	30	.71	0.00	33
Card Tenders, Comber Tenders, and/or Card Strippers	80	1.80	10.07	67
Creelers, Yarn	80	1.87	2.99	67
Cutters, Machine	80	1.83	0.00	17
Doffers	130	3.08	2.74	50
Drawing-Frame Tenders and/or Gill-Box Tenders	70	1.55	8.09	50
Electricians	30	.74	8.80	67
Harness Placers	40	.83	16.23	33
Inspectors	120	2.78	24.15	50
Loom Fixers	230	5.28	1.08	67

Table 12 (Continued) Broad Woven Fabric Mills, Cotton, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Mechanics, Maintenance..........	30	.71	0.00	33
Oilers.........................	40	.99	15.42	67
Section Repairers and Setters...	190	4.38	8.28	67
Sewing Machine Operators, Regular Equipment-Nongarment..	30	.76	47.54	33
Slasher Tenders................	50	1.04	11.61	50
Slubber Tenders................	70	1.60	6.13	50
Smash Hands....................	70	1.53	.94	67
Spinners, Frame................	260	6.05	5.53	67
Spooler Operators, Automatic....	80	1.80	34.83	33
Warp-Tying Machine Tenders......	40	.83	3.88	67
Weavers........................	300	7.05	10.93	67
Winder Operators, Automatic.....	100	2.36	24.24	67
All Other Skilled Craftsmen and Kindred Workers..............	130	3.03	na	na
All Other Operatives and Semi-skilled Workers..............	710	16.50	na	na
All Other Laborers and Unskilled Workers......................	620	14.30	na	na
CLERICAL OCCUPATIONS, TOTAL.......	190	4.25	na	na
General Clerks, Office..........	50	1.15	5.23	33
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	40	.81	6.86	50
All Other Clerical Workers......	100	2.29	na	na

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATION IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	83

SIC 25
FURNITURE AND FIXTURES

Household furniture and public building fixtures are the two chief product categories of the Furniture and Fixtures Industry in Texas. Most of the 407 plants in this industry are small. Many of them specialize in mattress production, long a significant industry in Texas because of its dependence on cotton supplies.

As in similar manufacturing industries, the majority of occupations in this major group were in blue-collar Maintenance and Production occupations with an estimated employment of 14,200 in June of 1977. This category accounted for slightly over 79 percent of the industry's total of 17,790. There were no particularly dominant occupations within this category with the possible exception of Assemblers, Nongarment Sewing Machine Operators, and Upholsterers.

Employment in the Furniture and Fixtures Industry has grown slightly over 15 percent from 1975 to 1977. Since continued growth is related to construction activity; any abatement in this area will have some impact on the total Furniture and Fixtures Industry.

Average Annual Employment for the Furniture and Fixtures Industry*

1975	15,500
1976	16,800
1977	17,900

*Source: Current Employment Statistics Program.

Table 13
SIC 25
Furniture and Fixtures
Statewide

This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	17,790	100.00	na	na
MANAGERS AND OFFICERS.............	860	4.85	4.64	87
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	320	1.80	na	na
Accountants and Auditors........	80	.43	9.02	21
Drafters........................	60	.34	9.82	9
Purchasing Agents and/or Buyers.	50	.28	6.30	16
All Other Professional and Technical Workers.............	130	.73	na	na
SERVICE OCCUPATIONS, TOTAL........	270	1.53	na	na
Janitors, Porters, and Cleaners.	220	1.23	6.04	45
All Other Service Workers.......	50	.29	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	14,210	79.73	na	na
Supervisors, Nonworking.........	540	3.02	4.28	48
Assemblers, Class A.............	270	1.51	17.64	15
Assemblers, Class B.............	420	2.36	13.38	19
Assemblers, Class C.............	1,080	6.08	9.66	33
Band-Scroll Saw Operators.......	40	.21	15.97	9
Boring Machine Operators, Wood..	70	.39	9.31	9
Cabinetmakers...................	450	2.51	8.97	25
Carpenters......................	50	.29	30.46	6
Cushion Makers..................	250	1.42	12.08	20
Cut-Off Saw Operators, Lumber...	190	1.05	8.99	27
Delivery and Route Workers......	90	.48	14.09	7
Drill-Press and/or Boring Machine Operators............	30	.17	0.00	3

Table 13 (Continued) Furniture and Fixtures, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers....................	60	.34	16.58	5
Furniture Finishers............	140	.81	7.77	7
Gluers and/or Cementers, Hand...	140	.81	4.58	8
Gluing Machine Operators........	40	.23	19.21	5
Grinding and/or Abrading Machine Operators, Metal......	100	.58	4.86	5
Helpers, Trades.................	440	2.49	6.69	22
Industrial Truck Operators......	130	.73	7.84	21
Inspectors......................	160	.87	8.10	17
Laminating Machine Operators, Furniture....................	100	.53	20.42	12
Machine Setters, Woodworking....	50	.29	1.69	3
Machinists......................	30	.19	6.93	8
Maintenance Repairers, General Utility......................	70	.38	8.95	14
Mattress Makers.................	330	1.86	19.56	17
Mechanics, Maintenance..........	60	.33	9.82	9
Nailing Machine Operators.......	40	.23	23.44	6
Off-Bearers.....................	60	.36	24.39	5
Order Fillers...................	40	.21	18.48	5
Painters, Production............	390	2.16	10.38	37
Plastic Top Installers..........	150	.84	14.66	16
Plater Helpers..................	30	.18	4.28	3
Power Brake and/or Bending Machine Operators, Metal......	110	.59	14.26	9
Power Screwdriver Operators.....	80	.42	11.85	5
Production Packagers, Hand or Machine......................	240	1.32	8.91	18
Punch-Press Operators, Metal....	200	1.09	11.92	13
Ripsaw Operators................	260	1.44	15.33	28
Rubbers.........................	60	.34	12.19	5
Sanders, Wood...................	340	1.91	6.83	22
Sewing Machine Operators, Regular Equipment-Nongarment..	1,140	6.39	6.52	40
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment..........	270	1.49	11.24	19
Shaper and/or Router Operators..	80	.46	7.00	10
Shapers, Hand...................	50	.27	3.02	4
Sheet Metal Workers.............	90	.52	20.82	3
Sorters, Upholstery Parts.......	60	.32	18.93	7

Table 13 (Continued) Furniture and Fixtures, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Spring Machine Operators........	60	.32	33.45	3
Springers......................	150	.83	13.23	20
Staplers, Mattress and/or Bedspring....................	60	.34	39.09	5
Tenoner Operators..............	40	.21	8.30	5
Truck Drivers..................	440	2.46	5.21	52
Upholsterers...................	1,030	5.80	7.26	32
Upholstery Cutters.............	380	2.13	9.55	26
Upholstery Trimmers............	150	.86	14.59	13
Variety Saw Operators..........	80	.43	18.37	9
Welders and Flamecutters-A......	100	.55	27.68	7
Welders and Flamecutters-B......	120	.67	10.19	10
Welders and Flamecutters-C......	150	.86	6.76	7
Wood Machinists................	320	1.77	12.90	26
Woodworking Machine Operators...	250	1.40	13.33	20
All Other Mechanics and Repairers....................	50	.25	na	na
All Other Skilled Craftsmen and Kindred Workers..............	230	1.29	na	na
All Other Operatives and Semi-skilled Workers..............	560	3.13	na	na
All Other Laborers and Unskilled Workers......................	1,020	5.73	na	na
CLERICAL OCCUPATIONS, TOTAL.......	1,640	9.35	na	na
Clerical Supervisors, Office or Plant........................	50	.30	28.25	5
Accounting Clerks..............	90	.52	7.47	22
Bookkeepers, Hand..............	140	.78	13.08	32
General Clerks, Office.........	250	1.42	7.77	42
Order Clerks...................	30	.19	5.84	8
Payroll and/or Timekeeping Clerks.......................	40	.20	7.87	13
Production Clerks and/or Coordinators.................	70	.39	9.48	14
Secretaries....................	160	.91	7.83	35
Shipping and/or Receiving Clerks	180	1.03	8.83	40
Shipping Packers...............	250	1.40	9.10	34
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	90	.51	7.73	11
Typists........................	50	.27	13.15	7
All Other Clerical Workers......	240	1.37	na	na

Table 13 (Continued) Furniture and Fixtures, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	490	2.75	na	na
Sales Clerks....................	40	.20	40.36	3
Sales Representatives, Sales Agents, and/or Sales Associates....................	450	2.55	10.29	44

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..................................	87
Truck Drivers..	52
Supervisors, Nonworking................................	48
Janitors, Porters, and Cleaners........................	45
Sales Representatives, Sales Agents, and/or Sales Associates....................................	44

Table 14
SIC 25
Furniture and Fixtures
Dallas-Fort Worth SMSA

This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	5,860	100.00	na	na
MANAGERS AND OFFICERS.............	300	5.11	7.13	89
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	110	1.78	na	na
Accountants and Auditors........	30	.48	18.81	20
All Other Professional and Technical Workers............	80	1.30	na	na
SERVICE OCCUPATIONS, TOTAL........	80	1.41	na	na
Janitors, Porters, and Cleaners.	60	1.02	10.13	38
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	4,550	77.75	na	na
Supervisors, Nonworking.........	170	2.96	7.23	50
Assemblers, Class A.............	100	1.64	45.48	12
Assemblers, Class B.............	130	2.28	31.37	18
Assemblers, Class C.............	360	6.21	17.10	39
Cabinetmakers...................	160	2.67	13.78	26
Cushion Makers..................	70	1.21	16.60	18
Cut-Off Saw Operators, Lumber...	80	1.44	12.54	32
Furniture Finishers.............	40	.68	11.84	9
Gluers and/or Cementers, Hand...	30	.56	9.64	5
Helpers, Trades.................	210	3.57	7.13	18
Industrial Truck Operators......	40	.73	18.34	18
Inspectors......................	50	.77	20.09	14
Mattress Makers.................	120	2.05	41.92	13

Table 14 (Continued) Furniture and Fixtures, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Painters, Production............	120	1.97	19.10	34
Plastic Top Installers..........	50	.80	23.59	17
Production Packagers, Hand or Machine........................	60	1.02	22.77	17
Punch-Press Operators, Metal....	80	1.33	20.48	16
Ripsaw Operators................	120	2.00	31.58	29
Sanders, Wood...................	100	1.75	17.34	17
Sewing Machine Operators, Regular Equipment-Nongarment..	350	6.07	14.19	34
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment..........	120	2.05	13.79	16
Springers.......................	60	.99	22.44	21
Truck Drivers...................	160	2.76	9.44	45
Upholsterers....................	300	5.06	14.90	29
Upholstery Cutters..............	130	2.16	11.01	24
Upholstery Trimmers.............	70	1.20	17.92	14
Welders and Flamecutters-A......	40	.63	22.97	8
Welders and Flamecutters-B......	50	.87	22.65	11
Wood Machinists.................	110	1.92	28.25	26
Woodworking Machine Operators...	80	1.35	16.42	16
All Other Skilled Craftsmen and Kindred Workers...............	220	3.74	na	na
All Other Operatives and Semi-skilled Workers..............	510	8.79	na	na
All Other Laborers and Unskilled Workers.......................	260	4.42	na	na
CLERICAL OCCUPATIONS, TOTAL.......	640	10.97	na	na
Accounting Clerks...............	40	.66	12.52	28
Bookkeepers, Hand...............	60	1.06	24.91	30
General Clerks, Office..........	80	1.40	17.11	37
Production Clerks and/or Coordinators..................	40	.60	17.73	18
Secretaries.....................	40	.68	13.00	30
Shipping and/or Receiving Clerks	60	1.04	12.02	42
Shipping Packers................	80	1.42	17.51	34
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	50	.80	14.33	14
All Other Clerical Workers......	190	3.27	na	na

Table 14 (Continued) Furniture and Fixtures, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	180	2.98	na	na
Sales Clerks....................	30	.42	44.83	4
Sales Representatives, Sales Agents, and/or Sales Associates....................	150	2.55	10.55	43

[1] Based on unrounded data.
[2] Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	89
Supervisors, Nonworking.............................	50
Truck Drivers..	45
Sales Representatives, Sales Agents, and/or Sales Associates..	43
Shipping and/or Receiving Clerks...................	42

Table 15
SIC 251
Household Furniture
Statewide

This group includes establishments primarily engaged in manufacturing wood and/or metal household furniture; mattresses and bedsprings; wood television, radio, phonograph, and sewing machine cabinets; and household furniture, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	11,000	100.00	na	na
MANAGERS AND OFFICERS	470	4.27	7.70	86
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	120	1.14	na	na
Accountants and Auditors	30	.31	17.39	17
All Other Professional and Technical Workers	90	.83	na	na
SERVICE OCCUPATIONS, TOTAL	170	1.52	na	na
Janitors, Porters, and Cleaners	130	1.18	8.62	48
All Other Service Workers	40	.34	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	8,910	81.02	na	na
Supervisors, Nonworking	340	3.08	6.18	55
Assemblers, Class A	120	1.12	36.46	11
Assemblers, Class B	250	2.31	21.61	12
Assemblers, Class C	650	5.97	14.96	32
Boring Machine Operators, Wood	60	.53	9.63	11
Cabinetmakers	60	.50	39.46	7
Cushion Makers	220	2.00	13.93	35
Cut-Off Saw Operators, Lumber	130	1.17	11.21	29
Delivery and Route Workers	80	.73	14.91	10
Furniture Finishers	110	.98	10.03	8
Gluers and/or Cementers, Hand	60	.52	8.63	7
Helpers, Trades	260	2.32	9.14	16
Industrial Truck Operators	70	.61	13.74	26
Inspectors	90	.77	10.97	21

Table 15 (Continued) Household Furniture, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Machine Setters, Woodworking....	50	.45	1.79	5
Maintenance Repairers, General Utility......................	40	.35	13.69	16
Mattress Makers................	330	3.02	19.56	35
Mechanics, Maintenance..........	40	.35	13.14	9
Nailing Machine Operators.......	30	.31	27.46	9
Off-Bearers....................	40	.38	37.17	5
Painters, Production...........	170	1.51	22.11	27
Power Screwdriver Operators.....	30	.31	25.30	4
Production Packagers, Hand or Machine......................	180	1.64	9.85	24
Ripsaw Operators...............	200	1.84	19.22	33
Rubbers........................	40	.40	11.82	5
Sanders, Wood..................	240	2.15	8.47	21
Sewing Machine Operators, Regular Equipment-Nongarment..	1,010	9.21	7.03	64
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment..........	260	2.37	11.41	36
Shaper and/or Router Operators..	50	.41	8.03	7
Shapers, Hand..................	40	.34	2.36	4
Sorters, Upholstery Parts.......	60	.52	18.93	14
Spring Machine Operators........	60	.52	33.45	5
Springers......................	140	1.29	13.86	36
Staplers, Mattress and Bedspring	60	.54	40.39	8
Tenoner Operators..............	30	.29	8.75	6
Truck Drivers..................	350	3.15	6.25	68
Upholsterers...................	840	7.66	8.41	47
Upholstery Cutters.............	340	3.11	10.47	42
Upholstery Trimmers............	150	1.33	15.22	22
Variety Saw Operators..........	50	.45	27.99	11
Wood Machinists................	220	1.96	17.83	27
Woodworking Machine Operators...	160	1.47	14.99	18
All Other Mechanics and Repairers....................	30	.29	na	na
All Other Skilled Craftsmen and Kindred Workers..............	140	1.24	na	na
All Other Operatives and Semi-skilled Workers..............	400	3.66	na	na
All Other Laborers and Unskilled Workers.....................	630	5.75	na	na

Table 15 (Continued) Household Furniture, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	1,000	9.01	na	na
Clerical Supervisors, Office or Plant.........................	40	.40	34.61	8
Accounting Clerks..............	50	.44	12.55	21
Bookkeepers, Hand...............	100	.88	17.95	38
General Clerks, Office..........	140	1.28	12.16	49
Production Clerks and/or Coordinators.................	40	.31	18.51	13
Shipping and/or Receiving Clerks	120	1.05	13.38	46
Shipping Packers................	160	1.46	12.16	39
Secretaries.....................	90	.81	12.97	35
Stock Clerks-Stockroom, Warehouse or Storage Yard.........	40	.31	18.24	11
Typists.........................	30	.29	13.91	9
All Other Clerical Workers......	190	1.73	na	na
SALES OCCUPATIONS, TOTAL..........	330	3.04	na	na
Sales Clerks....................	30	.30	43.78	5
Sales Representatives, Sales Agents, and/or Sales Associates....................	300	2.74	15.39	51

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	86
Truck Drivers..	68
Sewing Machine Operators, Regular Equipment-Nongarment	64
Supervisors, Nonworking..............................	55
Sales Representatives, Sales Agents, and/or Sales Associates..	51
General Clerks, Office...............................	49

Table 16
SIC 253
Public Building and Related Furniture
Statewide

This group includes establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries. Also included are establishments engaged in manufacturing seats for public conveyances, as well as seats for automobiles and aircraft.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,510	100.00	na	na
MANAGERS AND OFFICERS............	130	3.72	5.93	92
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	100	2.87	na	na
SERVICE OCCUPATIONS..............	40	1.12	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,850	81.10	na	na
Supervisors, Nonworking.........	110	3.23	3.26	64
Assemblers, Class A............	100	2.75	5.18	28
Assemblers, Class B............	100	2.78	5.03	28
Assemblers, Class C............	240	6.87	9.10	40
Cabinetmakers..................	80	2.40	8.24	40
Gluers and/or Cementers, Hand...	80	2.17	0.00	20
Grinding and/or Abrading Machine Operators, Metal.............	60	1.80	0.00	20
Helpers, Trades................	100	2.86	10.71	40
Industrial Truck Operators......	40	1.03	1.77	32
Inspectors.....................	60	1.60	13.40	32
Painters, Production...........	60	1.83	6.97	64
Plater Helpers.................	30	.85	0.00	16
Power Brake and/or Bending Machine Operators, Metal......	30	.88	2.88	24
Power Screwdriver Operators.....	40	1.03	0.00	16
Punch-Press Operators, Metal....	70	1.86	12.37	28
Sanders, Wood..................	60	1.83	12.35	40
Sewing Machine Operators, Regular Equipment-Nongarment..	110	3.00	19.08	40

Table 16 (Continued) Public Building and Related Furniture, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Truck Drivers	40	1.11	9.37	52
Upholsterers	130	3.69	8.89	36
Welders and Flamecutters-A	40	1.20	17.01	20
Welders and Flamecutters-B	50	1.49	21.65	28
Welders and Flamecutters-C	100	2.86	1.78	24
Wood Machinists	40	1.03	32.14	32
All Other Skilled Craftsmen and Kindred Workers	230	6.60	na	na
All Other Operatives and Semi-skilled Workers	490	13.91	na	na
All Other Laborers and Unskilled Workers	360	10.27	na	na
CLERICAL OCCUPATIONS, TOTAL	340	9.75	na	na
General Clerks, Office	70	1.89	4.61	68
Secretaries	30	.88	10.54	32
Shipping and/or Receiving Clerks	40	1.00	8.15	60
Shipping Packers	30	.97	9.19	44
All Other Office Clerical Workers	120	3.47	na	na
All Other Plant Clerical Workers	50	1.52	na	na
SALES OCCUPATIONS, TOTAL	50	1.43	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	50	1.43	8.66	44

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	92
General Clerks, Office	68
Painters, Production	64
Supervisors, Nonworking	64
Shipping and/or Receiving Clerks	60

SIC 26
PAPER AND ALLIED PRODUCTS

Texas has approximately 200 paper manufacturing establishments; fewer than a dozen actually produce woodpulp and paper. All of these are in the eastern part of the State where timber is readily available. Most of the plants are associated with the production of paper boxes, bags, stationery, and domestic products.

As of April 1977, this industry employed an estimated 17,100 individuals, with 77 percent employed in Maintenance and Production. Two major industry segments--Converted Paper and Paperboard Products, and Paperboard Containers and Boxes make up 68 percent of the total Paper and Allied Products Industry's employment.

Employment in the Paper and Allied Products Industry is expected to increase more slowly than the average for all industries through the mid-1980's. Although a significant number of job openings are expected due to growth, most openings will stem from attrition. Job openings may fluctuate from year to year, because the demand for paper and paper products is sensitive to changes in economic conditions.

Average Annual Employment for the Paper and Allied Industries*

1975	18,200
1976	19,900
1977	21,200

*Source: Current Employment Statistics Program.

Table 17
SIC 26
Paper and Allied Products
Statewide

This major group includes the manufacture of pulps from wood and other cellulose fibers, and from rags; the manufacture of paper and paperboard; and the manufacture of paper and paperboard into converted products such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	17,110	100.00	na	na
MANAGERS AND OFFICERS............	780	4.57	10.26	95
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	430	2.51	na	na
Accountants and Auditors........	80	.48	11.59	35
Commercial Artists..............	40	.21	28.61	11
Mechanical Engineers............	30	.18	24.58	10
Personnel and Labor Relations Specialists..................	60	.32	16.58	18
Purchasing Agents and/or Buyers.	50	.31	20.16	20
All Other Engineers.............	60	.33	na	na
All Other Professional and Technical Workers............	110	.66	na	na
SERVICE OCCUPATIONS, TOTAL........	230	1.35	na	na
Janitors, Porters, and Cleaners.	190	1.10	6.27	47
All Other Service Workers.......	40	.25	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	13,240	77.46	na	na
Supervisors, Nonworking.........	820	4.80	5.77	67
Assemblers, Class B.............	950	5.55	2.51	4
Assemblers, Class C.............	390	2.30	43.63	8
Back Tenders....................	130	.76	7.07	3
Bag Machine Operators...........	240	1.39	42.45	14
Baling Machine Operators........	150	.85	13.62	45
Box Makers, Paperboard..........	40	.22	33.47	6

Table 17 (Continued) Paper and Allied Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Carton-Forming Machine Operators	60	.34	22.55	14
Coating Mixer Tenders...........	40	.23	3.22	3
Conveyor Operators or Tenders..	100	.57	17.38	12
Corrugator-Knife Operators......	60	.37	10.33	18
Corrugator Operators............	140	.79	12.09	23
Cutters, Machine................	210	1.23	35.96	18
Cutting and Creasing Press Operators.....................	100	.59	20.29	26
Delivery and Route Workers......	30	.18	26.18	7
Die Cutters and/or Clicking Machine Operators.............	170	1.00	24.73	17
Die Makers......................	40	.20	21.70	12
Die Mounters....................	70	.43	12.98	28
Electricians....................	60	.34	10.85	11
Envelope Machine Operators......	330	1.90	30.79	9
Flexo-Folder-Gluer Operators....	120	.67	19.44	22
Folding Machine Operators, Paper	280	1.60	10.04	6
Fourdrinier Machine Tenders.....	40	.25	20.90	4
Fourth Hands and/or Fifth Hands, Paper Machine................	90	.54	9.89	3
Helpers, Trades.................	140	.79	19.75	8
Industrial Truck Operators......	470	2.73	5.67	54
Inspectors......................	120	.69	17.78	10
Instrument Mechanics............	50	.29	0.00	3
Machine Setters, Paper Goods....	350	2.05	20.06	20
Machinists......................	30	.19	25.32	10
Maintenance Repairers, General Utility.......................	130	.77	14.72	30
Mechanics, Automotive...........	30	.18	9.62	11
Mechanics, Maintenance..........	250	1.46	12.15	28
Millwrights.....................	200	1.18	3.39	4
Mixers and/or Blenders, Chemicals and Chemical Products......................	60	.33	11.69	9
Oilers..........................	30	.18	9.89	5
Order Fillers...................	50	.26	26.91	13
Panel Machine Operators, Patch Machine Operators, and/or Sealing Machine Operators.....	60	.36	35.73	4
Paper Reel Operators and/or Rewinder Operators............	40	.24	24.79	5
Press Operators and/or Plate Printers.....................	440	2.58	25.17	32

Table 17 (Continued) Paper and Allied Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Printer-Slotter Feeders.........	230	1.32	14.21	31
Printer-Slotter Operators.......	180	1.04	15.10	34
Production Packagers, Hand or Machine......................	770	4.51	22.09	33
Ruling Machine Operators........	30	.17	43.31	3
Scrappers and/or Strippers, Hand or Machine...................	80	.45	30.02	11
Slitter-Creaser-Slotter Operators....................	60	.35	22.87	19
Stapling Machine Operators......	130	.73	17.24	30
Stringing Machine Operators and/or Tape-Fastener Machine Operators....................	40	.25	6.05	3
Taping Machine Operators........	160	.91	15.48	32
Testers........................	70	.39	4.15	6
Truck Drivers..................	420	2.46	7.51	65
Welders and Flamecutters........	60	.36	1.54	3
Wrapping Machine Operators......	40	.22	28.12	6
All Other Mechanics and Repairers....................	70	.38	na	na
All Other Skilled Craftsmen and Kindred Workers...............	430	2.50	na	na
All Other Operatives and Semi-skilled Workers..............	1,730	10.14	na	na
All Other Laborers and Unskilled Workers......................	1,630	9.55	na	na
CLERICAL OCCUPATIONS, TOTAL.......	1,650	9.57	na	na
Clerical Supervisors, Office or Plant........................	60	.35	11.82	13
Accounting Clerks..............	110	.63	14.06	39
Bookkeepers, Hand..............	70	.38	42.85	21
Bookkeeping and/or Billing Machine Operators............	30	.17	34.34	14
Box Estimators, Paperboard Products.....................	70	.41	24.68	28
General Clerks, Office..........	110	.62	19.19	33
Keypunch Operators.............	30	.18	14.32	9
Order Clerks...................	110	.63	22.29	26
Payroll and/or Timekeeping Clerks.......................	70	.38	15.50	34
Personnel Clerks...............	40	.23	7.32	15

Table 17 (Continued) Paper and Allied Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Production Clerks and/or Coordinators	100	.56	9.33	35
Secretaries	150	.90	10.40	57
Shipping and/or Receiving Clerks.	130	.73	13.94	52
Shipping Packers	220	1.28	18.37	16
Stock Clerks-Stockroom, Warehouse, or Storage Yard	60	.35	4.81	10
Switchboard Operator-Receptionists	60	.36	16.30	35
Typists	60	.36	15.93	22
All Other Clerical Workers	170	.97	na	na
SALES OCCUPATIONS, TOTAL	780	4.53	na	na
Sales Clerks	30	.15	24.82	8
Sales Representatives, Sales Agents, and/or Sales Associates	750	4.37	7.79	71

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	95
Sales Representatives, Sales Agents and/or Sales Associates	71
Supervisors, Nonworking	67
Truck Drivers	65
Secretaries	57

Table 18
SIC 265
Paperboard Containers and Boxes
Statewide

This group includes establishments primarily engaged in manufacturing folding and set-up paperboard boxes from purchased paperboard; corrugated and solid fiber boxes from purchased paperboard of fiber stock; sanitary food containers from special food board; and fiber cans, tubes, drums, and similar products from purchased materials.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	7,660	100.00	na	na
MANAGERS AND OFFICERS	390	5.04	9.72	98
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	180	2.45	na	na
Accountants and Auditors	40	.54	14.82	36
Purchasing Agents and/or Buyers	30	.44	28.39	23
All Other Professional and Technical Workers	110	1.46	na	na
SERVICE OCCUPATIONS, TOTAL	80	1.07	na	na
Janitors, Porters, and Cleaners	70	.94	10.68	48
All Other Service Workers	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	6,000	78.24	na	na
Supervisors, Nonworking	400	5.20	7.52	77
Baling Machine Operators	120	1.50	16.97	64
Carton-Forming Machine Operators	60	.76	22.55	25
Conveyor Operators or Tenders	60	.81	26.55	18
Corrugator Knife Operators	60	.83	10.33	32
Corrugator Operators	130	1.72	12.21	39
Cutting and Creasing Press Operators	100	1.31	20.29	46
Die Cutters and/or Clicking Machine Operators	120	1.59	29.46	23

Table 18 (Continued) Paperboard Containers and Boxes, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Die Makers	40	.45	21.70	21
Die Mounters	60	.80	15.24	45
Flexo-Folder-Gluer Operators	110	1.43	14.85	38
Helpers, Trades	70	.94	36.81	9
Industrial Truck Operators	280	3.62	8.67	71
Inspectors	40	.50	26.59	9
Machine Setters, Paper Goods	120	1.54	27.35	13
Maintenance Repairers, General Utility	100	1.24	15.65	38
Mechanics, Maintenance	150	1.99	18.05	34
Press Operators and/or Plate Printers	110	1.40	20.49	21
Production Packagers, Hand or Machine	430	5.60	29.84	30
Printer-Slotter Feeders	210	2.66	13.32	54
Printer-Slotter Operators	150	1.99	14.49	57
Scrappers and/or Strippers, Hand or Machine	80	1.00	30.02	20
Slitter-Creaser-Slotter Operators	60	.79	22.87	34
Slitting Machine Operators	60	.75	25.47	30
Stapling Machine Operators	80	1.09	19.64	45
Taping Machine Operators	160	2.04	15.48	57
Truck Drivers	360	4.61	6.15	84
All Other Mechanics and Repairers	30	.44	na	na
All Other Skilled Craftsmen and Kindred Workers	110	1.49	na	na
All Other Operatives and Semi-skilled Workers	980	12.74	na	na
All Other Laborers and Unskilled Workers	1,160	15.14	na	na
CLERICAL OCCUPATIONS, TOTAL	680	8.89	na	na
Accounting Clerks	60	.79	12.94	45
Box Estimators, Paperboard Products	70	.92	24.68	50
General Clerks, Office	60	.80	16.75	32
Order Clerks	50	.62	16.76	23
Payroll and/or Timekeeping Clerks	40	.50	14.03	38

Table 18 (Continued) Paperboard Containers and Boxes, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Production Clerks and/or Coordinators	50	.67	13.87	45
Secretaries	80	1.05	12.24	63
Shipping and/or Receiving Clerks	70	.85	16.69	55
Switchboard Operator-Receptionists	30	.44	21.81	39
All Other Office Clerical Workers	140	1.77	na	na
All Other Plant Clerical Workers	30	.42	na	na
SALES OCCUPATIONS, TOTAL	330	4.29	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	310	3.98	8.84	80
All Other Sales Workers	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	98
Truck Drivers	84
Sales Representatives, Sales Agents, and/or Sales Associates	80
Supervisors, Nonworking	77
Industrial Truck Operators	71

SIC 27
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

In Texas, this major industry group employed approximately 50,930 workers during the survey period of May 1977. In contrast to other manufacturing industries, the employment in this industry was almost equally distributed between blue-collar and white-collar occupations. The largest single occupation in Production and Maintenance was the Offset Lithographic Press Operators, which employed 3,890 workers.

The two major segments that make up the bulk of the total industry employment are Newspapers - Publishing or Publishing and Printing, and Commercial Printing. Combined, they represent 75 percent of the employment. Newspapers take the lead with 43 percent. The printing and publishing segment is very widely dispersed geographically with hundreds of small newspaper and commercial printing establishments located in small cities scattered throughout the State. The largest single concentration of employment is in the Dallas-Fort Worth area with 35 percent.

Occupational groups in this industry are expected to fluctuate at different rates. Lithographic Craft Workers, for example, are expected to increase because of the growing use of lithography. Conversely, lithography does not require photoengraving, therefore, employment of photoengravers is expected to decline. The trend toward computerization of typesetting operations will reduce the need for some machine operators in composing rooms, while creating a demand for more computer typesetters.

Average Annual Employment for Printing, Publishing, and Allied Industries*

1975	46,400
1976	48,100
1977	50,700

*Source: Current Employment Statistics Program.

Table 19
SIC 27
Printing, Publishing, and Allied Industries
Statewide

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. Excluded are news syndicates, and textile printing and finishing.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	50,930	100.00	na	na
MANAGERS AND OFFICERS..............	5,030	9.88	4.33	85
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	5,540	10.88	na	na
Accountants and Auditors........	110	.20	30.82	7
Commercial Artists..............	610	1.19	33.81	11
Computer Programmers............	50	.09	6.01	3
Designers.......................	110	.21	48.96	1
Estimators, Printing Services...	80	.15	12.98	6
Photographers...................	290	.57	20.80	7
Purchasing Agents and/or Buyers.	90	.17	11.18	7
Reporters and Correspondents....	2,130	4.18	8.50	17
Systems Analysts, Electronic Data Processing...............	30	.06	4.39	2
Writers and/or Editors..........	1,770	3.46	11.03	27
All Other Professional Workers..	150	.29	na	na
All Other Technical Workers.....	120	.23	na	na
SERVICE OCCUPATIONS, TOTAL........	840	1.65	na	na
Supervisors, Nonworking-Service.	30	.06	6.79	2
Guards and Doorkeepers..........	40	.07	3.31	1
Janitors, Porters, and Cleaners.	730	1.42	8.43	28
All Other Service Workers.......	40	.07	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	25,130	49.34	na	na
Supervisors, Nonworking.........	780	1.52	5.82	25
Artists.........................	80	.15	9.86	3

Table 19 (Continued) Printing, Publishing, and Allied Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Bindery Workers, Assembly.......	1,290	2.52	10.85	21
Bindery Workers, Stitching......	370	.72	9.47	11
Bookbinders, Hand..............	290	.57	16.61	7
Bookbinders, Machine...........	620	1.22	10.58	14
Camera Operators, Printing......	990	1.94	5.77	44
Copy Cutters...................	90	.18	6.17	2
Copy Markers...................	180	.34	17.23	5
Cutters, Machine................	180	.34	9.26	5
Delivery and Route Workers......	1,070	2.10	7.60	33
Developers and/or Projection Printers......................	70	.13	16.30	3
Electricians....................	50	.10	11.82	2
Etchers and/or Engravers........	80	.15	26.76	2
Flexographic Press Operators....	30	.06	49.10	1
Gravure Press Operators, Rotogravure..................	50	.08	34.90	1
Hand Compositors................	690	1.34	23.39	14
Helpers, Trades.................	60	.10	5.68	1
Imposers and Makeup Arrangers...	810	1.58	13.50	14
Industrial Truck Operators......	70	.13	15.71	3
Inspectors......................	260	.50	14.72	3
Letter Press Operators-Sheet, Roll, or Web Fed.............	1,570	3.08	8.32	30
Letterset Press Operators-Sheet, Roll, or Web Fed.............	110	.22	5.55	1
Linecasting Machine Keyboard Operators....................	380	.74	22.00	7
Linecasting Machine Operators...	490	.95	8.71	15
Linecasting Machine Tenders.....	330	.65	19.59	12
Machinists......................	60	.11	6.28	3
Mailers.........................	1,110	2.17	10.07	16
Maintenance Repairers, General Utility......................	100	.20	12.74	4
Mechanics, Maintenance..........	100	.20	9.35	5
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed.........................	3,890	7.64	10.76	57
Order Fillers...................	30	.06	11.55	1
Pasteup Men.....................	1,010	1.97	10.02	15
Photoengravers..................	300	.59	16.13	9
Photolettering Machine Operators	40	.07	32.26	2
Phototypesetter Operators.......	350	.69	20.33	9

Table 19 (Continued) Printing, Publishing, and Allied Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Phototypesetting Machine Keyboard Operators............	390	.77	32.62	8
Phototypesetting Machine Monitors......................	80	.16	13.61	3
Platemakers....................	540	1.05	9.03	25
Press Assistants and Feeders....	940	1.84	10.12	19
Production Packagers, Hand or Machine......................	140	.28	10.35	3
Proofreaders, Composed Copy.....	960	1.89	15.46	23
Screen or Stencil Printers and/or Setters................	130	.25	28.74	2
Setters, Bindery Machines.......	270	.53	16.32	7
Steel Die Press Operators.......	50	.10	49.40	1
Stereotypers....................	50	.08	36.13	1
Strike-On Machine Operators.....	40	.08	10.32	2
Strippers......................	830	1.62	6.02	23
Truck Drivers..................	320	.62	5.78	6
All Other Bindery Workers.......	880	1.72	na	na
All Other Skilled Craftsmen and Kindred Workers...............	250	.49	na	na
All Other Operatives and Semi-skilled Workers..............	700	1.38	na	na
All Other Laborers and Unskilled Workers......................	580	1.13	na	na
CLERICAL OCCUPATIONS, TOTAL.......	10,230	20.08	na	na
Clerical Supervisors, Office or Plant........................	190	.38	16.00	5
Accounting Clerks..............	550	1.07	17.27	22
Bookkeepers, Hand..............	930	1.81	8.93	36
Bookkeeping and Billing Machine Operators....................	50	.10	15.15	3
Cashiers.......................	40	.06	8.34	3
Circulation Clerks.............	430	.84	13.60	8
Classified-Ad Clerks, Newspaper.	180	.35	15.26	5
Computer Operators.............	100	.20	17.54	5
Customer Service Representatives, Printing and Publishing	190	.37	8.07	5
File Clerks....................	130	.24	15.56	4
General Clerks, Office.........	1,780	3.50	7.68	44
Keypunch Operators.............	160	.30	8.63	5

Table 19 (Continued) Printing, Publishing, and Allied Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Messengers	150	.29	23.70	5
Order Clerks	360	.71	4.47	5
Payroll and/or Timekeeping Clerks	90	.16	13.60	6
Personnel Clerks	40	.08	9.96	3
Production Clerks and/or Coordinators	170	.33	5.71	6
Secretaries	1,260	2.48	10.04	45
Shipping and/or Receiving Clerks	690	1.34	7.53	27
Shipping Packers	150	.29	14.28	4
Stenographers	40	.07	14.79	1
Stock Clerks-Stockroom, Warehouse, or Storage Yard	100	.20	13.16	5
Switchboard Operator-Receptionists	140	.26	26.76	9
Telephone Ad-Takers, Newspaper	510	1.00	17.84	6
Typists	800	1.57	17.45	23
All Other Office Machine Operators	260	.50	na	na
All Other Office Clerical Workers	630	1.24	na	na
All Other Plant Clerical Workers	110	.22	na	na
SALES OCCUPATIONS, TOTAL	4,160	8.18	na	na
Sales Clerks	60	.12	24.09	2
Sales Representatives, Sales Agents, and/or Sales Associates	3,990	7.84	5.47	51
All Other Sales Workers	110	.21	na	na

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	85
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	57
Sales Representatives, Sales Agents, and/or Sales Associates	51
Secretaries	45
Camera Operators, Printing	44
General Clerks, Office	44

Table 20
SIC 27
Printing, Publishing, and Allied Industries
Austin SMSA

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. Excluded are news syndicates, and textile printing and finishing.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,180	100.00	na	na
MANAGERS AND OFFICERS.............	190	8.62	6.38	85
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	220	10.28	na	na
Reporters and Correspondents....	80	3.78	7.86	21
Writers and/or Editors..........	80	3.60	4.67	38
All Other Professional and Technical Workers.............	60	2.88	na	na
SERVICE OCCUPATIONS, TOTAL........	50	2.15	na	na
Janitors, Porters, and Cleaners.	30	1.50	8.30	25
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	920	42.94	na	na
Bindery Workers, Assembly.......	30	1.45	13.94	25
Bindery Workers, Stitching......	30	1.50	3.26	15
Bookbinders, Machine............	40	2.00	13.49	23
Camera Operators, Printing......	40	1.91	11.35	44
Delivery and Route Workers......	60	2.50	5.77	33
Letter Press Operators-Sheet, Roll, or Web Fed.............	80	3.60	8.51	23

Table 20 (Continued) Printing, Publishing, and Allied Industries, Austin SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Linecasting Machine Operators...	50	2.37	22.59	17
Mailers........................	40	2.00	7.05	21
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed..........................	120	5.56	6.99	46
Pasteup Men....................	70	3.37	9.53	19
Press Assistants and Feeders....	30	1.45	6.04	17
Strippers......................	40	1.73	10.29	29
All Other Skilled Craftsmen and Kindred Workers...............	150	6.99	na	na
All Other Operatives and Semi-skilled Workers...............	110	5.21	na	na
All Other Laborers and Unskilled Workers......................	30	1.19	na	na
CLERICAL OCCUPATIONS, TOTAL.......	650	29.19	na	na
Bookkeepers, Hand...............	30	1.45	13.91	38
General Clerks, Office..........	40	1.77	16.27	31
Order Clerks....................	160	7.11	0.00	8
Secretaries.....................	60	2.60	8.41	54
Shipping and/or Receiving Clerks	40	1.87	8.22	38
All Other Office Clerical Workers......................	280	12.75	na	na
All Other Plant Clerical Workers	40	1.60	na	na
SALES OCCUPATIONS, TOTAL..........	150	6.81	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	130	6.06	7.39	44
All Other Sales Workers.........	2/			

[1] Based on unrounded data.
[2] Estimate below cut-off level so occupations will not add to category total.

Table 20 (Continued) Printing, Publishing, and Allied Industries, Austin SMSA

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	85
Secretaries	54
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	46
Camera Operators, Printing	44
Sales Representatives, Sales Agents, and/or Sales Associates	44

Table 21
SIC 27
Printing, Publishing, and Allied Industries
Dallas-Fort Worth SMSA

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. Excluded are news syndicates, and textile printing and finishing.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	17,940	100.00	na	na
MANAGERS AND OFFICERS	1,460	8.13	5.82	87
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	1,260	6.96	na	na
Accountants and Auditors	40	.23	12.92	7
Commercial Artists	170	.93	13.56	12
Computer Programmers	30	.17	3.80	3
Estimators, Printing Services	40	.19	25.08	9
Photographers	60	.33	13.68	3
Purchasing Agents and/or Buyers	40	.23	20.85	9
Reporters and Correspondents	370	2.05	22.50	11
Writers and/or Editors	350	1.94	11.73	25
All Other Professional Workers	130	.71	na	na
All Other Technical Workers	30	.15	na	na
SERVICE OCCUPATIONS, TOTAL	250	1.40	na	na
Janitors, Porters, and Cleaners	210	1.15	8.22	31
All Other Service Workers	40	.25	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	9,820	54.90	na	na
Supervisors, Nonworking	350	1.92	7.49	33
Artists	40	.24	12.83	3

Table 21 (Continued) Printing, Publishing, and Allied Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Bindery Workers, Assembly.......	630	3.52	20.36	24
Bindery Workers, Stitching......	180	.99	13.57	15
Bookbinders, Hand..............	80	.41	23.32	7
Bookbinders, Machine...........	250	1.38	13.12	16
Camera Operators, Printing......	340	1.89	7.36	46
Copy Cutters....................	40	.24	0.00	1
Copy Markers....................	80	.44	2.20	2
Cutters, Machine................	100	.56	14.09	7
Delivery and Route Workers......	350	1.96	9.25	34
Developers and/or Projection Printers......................	40	.20	21.13	4
Electricians....................	40	.21	14.45	3
Etchers and/or Engravers........	40	.24	46.76	2
Hand Compositors................	140	.79	15.49	16
Imposers and Makeup Arrangers...	250	1.37	15.11	15
Inspectors......................	150	.85	17.04	5
Letter Press Operators-Sheet, Roll, or Web Fed.............	580	3.21	13.28	31
Letterset Press Operators-Sheet, Roll, or Web Fed.............	90	.49	.89	1
Linecasting Machine Keyboard Operators....................	130	.74	13.05	8
Linecasting Machine Operators...	140	.78	17.95	15
Linecasting Machine Tenders.....	90	.49	14.91	12
Machinists......................	40	.23	8.55	4
Mailers.........................	500	2.77	19.37	17
Maintenance Repairers, General Utility......................	70	.41	16.70	6
Mechanics, Maintenance..........	40	.23	11.63	5
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed.........................	1,460	8.12	7.68	56
Pasteup Men.....................	310	1.73	8.53	13
Photoengravers..................	130	.74	28.09	11
Phototypesetter Operators.......	70	.37	27.21	4
Phototypesetting Machine Keyboard Operators............	110	.63	21.88	7
Phototypesetting Machine Monitors......................	30	.17	32.24	4
Platemakers.....................	230	1.26	10.92	32
Press Assistants and Feeders....	400	2.25	18.43	22

Table 21 (Continued) Printing, Publishing, and Allied Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Proofreaders, Composed Copy.....	270	1.47	8.78	24
Screen or Stencil Printers and/or Setters................	70	.38	48.66	3
Setters, Bindery Machines.......	200	1.13	21.23	12
Strippers.......................	420	2.32	8.72	32
Truck Drivers...................	80	.45	20.82	4
All Other Bindery Workers.......	410	2.30	na	na
All Other Skilled Craftsmen and Kindred Workers...............	210	1.17	na	na
All Other Operatives and Semi-skilled Workers...............	340	1.92	na	na
All Other Laborers and Unskilled Workers......................	300	1.68	na	na
CLERICAL OCCUPATIONS, TOTAL.......	3,970	22.01	na	na
Clerical Supervisors, Office or Plant......................	80	.42	5.34	6
Accounting Clerks...............	200	1.09	7.94	25
Bookkeepers, Hand...............	250	1.40	11.51	41
Circulation Clerks..............	190	1.03	12.75	4
Classified-Ad Clerks, Newspaper.	70	.38	25.55	2
Computer Operators..............	30	.17	9.13	4
Customer Service Representatives, Printing and Publishing...................	90	.50	7.55	8
File Clerks.....................	60	.31	21.08	4
General Clerks, Office..........	630	3.49	6.66	47
Keypunch Operators..............	70	.38	5.06	4
Messengers......................	50	.29	34.03	5
Order Clerks....................	100	.55	6.06	6
Payroll and/or Timekeeping Clerks.......................	50	.26	23.21	8
Production Clerks and/or Coordinators..................	110	.60	5.37	7
Secretaries.....................	420	2.32	6.15	45
Shipping and/or Receiving Clerks	400	2.21	12.33	40
Shipping Packers................	50	.27	17.61	5
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	50	.28	20.26	7
Switchboard Operator-Receptionists................	60	.31	18.06	11

Table 21 (Continued) Printing, Publishing, and Allied Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Telephone Ad-Takers, Newspaper..	210	1.16	12.11	3
Typists.......................	240	1.32	11.44	30
All Other Office Machine Operators....................	90	.51	na	na
All Other Office Clerical Workers.....................	440	2.48	na	na
All Other Plant Clerical Workers	30	.15	na	na
SALES OCCUPATIONS, TOTAL.........	1,180	6.58	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	1,150	6.40	8.26	56
All Other Sales Workers.........	30	.17	na	na

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	87
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed..	56
Sales Representatives, Sales Agents, and/or Sales Associates......................................	56
General Clerks, Office.............................	47
Camera Operators, Printing.........................	46

Table 22
SIC 27
Printing, Publishing, and Allied Industries
San Antonio SMSA

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. Excluded are news syndicates, and textile printing and finishing.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,340	100.00	na	na
MANAGERS AND OFFICERS............	280	8.32	7.66	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	340	9.71	na	na
Commercial Artists..............	50	1.34	13.39	12
Reporters and Correspondents....	140	4.13	7.61	12
Writers and/or Editors..........	100	2.84	7.01	24
All Other Professional and Technical Workers............	50	1.35	na	na
SERVICE OCCUPATIONS..............	40	1.14	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,710	51.43	na	na
Supervisors, Nonworking.........	50	1.55	12.25	19
Bindery Workers, Assembly.......	100	2.93	11.46	24
Camera Operators, Printing......	70	2.12	15.88	41
Delivery and Route Workers......	60	1.88	12.81	34
Hand Compositors................	40	1.13	24.77	20
Imposers and Makeup Arrangers...	40	1.25	28.46	10
Letter Press Operators-Sheet, Roll, or Web Fed.............	160	4.88	8.63	34
Linecasting Machine Operators...	30	.89	20.45	20
Mailers.........................	40	1.31	20.80	12

Table 22 (Continued) Printing, Publishing, and Allied Industries, San Antonio SMSA

Occupation	Estimated Empl.	% of Total Empl. 1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	250	7.45	6.92	56
Pasteup Men	80	2.42	6.06	12
Photengravers	30	.95	19.92	7
Phototypesetting Machine Keyboard Operators	30	.92	37.07	5
Platemakers	40	1.10	21.86	19
Production Packagers, Hand or Machine	50	1.34	.22	8
Proofreaders, Composed Copy	40	1.13	14.69	20
Strippers	50	1.37	17.81	19
Truck Drivers	70	2.21	1.54	8
All Other Bindery Workers	130	4.03	na	na
All Other Skilled Craftsmen and Kindred Workers	110	3.16	na	na
All Other Operatives and Semi-skilled Workers	200	5.92	na	na
All Other Laborers and Unskilled Workers	40	1.20	na	na
CLERICAL OCCUPATIONS, TOTAL	590	17.83	na	na
General Clerks, Office	90	2.60	7.17	36
Secretaries	90	2.75	17.68	42
Shipping and/or Receiving Clerks	40	1.22	9.34	20
Typists	30	.95	23.75	17
All Other Clerical Workers	340	10.26	na	na
SALES OCCUPATIONS, TOTAL	380	11.52	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	370	10.93	4.23	47
All Other Sales Workers	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 22 (Continued) Printing, Publishing, and Allied Industries, San Antonio SMSA

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	83
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	56
Sales Representatives, Sales Agents, and/or Sales Associates	47
Secretaries	42
Camera Operators, Printing	41

Table 23
SIC 271
Newspapers: Publishing, Publishing and Printing
Statewide

This group includes establishments primarily engaged in publishing newspapers, or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	21,920	100.00	na	na
MANAGERS AND OFFICERS.............	2,110	9.63	9.53	88
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	4,310	19.67	na	na
Photographers..................	280	1.29	21.52	37
Reporters and Correspondents....	2,010	9.15	8.99	72
Writers and/or Editors..........	1,460	6.66	13.21	87
All Other Professional and Technical Workers............	560	2.55	na	na
SERVICE OCCUPATIONS, TOTAL........	450	2.05	na	na
Guards and Doorkeepers..........	30	.14	4.16	5
Janitors, Porters, and Cleaners.	370	1.69	15.56	47
All Other Service Workers.......	50	.21	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	7,890	35.98	na	na
Supervisors, Nonworking.........	220	1.01	14.78	35
Bindery Workers, Assembly.......	70	.30	28.34	3
Camera Operators, Printing......	200	.89	23.20	46
Copy Cutters...................	30	.15	9.98	7
Copy Markers...................	90	.41	32.59	20
Delivery and Route Workers......	480	2.18	15.24	41
Imposers and Makeup Arrangers...	600	2.72	17.73	35
Letter Press Operators-Sheet, Roll, or Web Fed.............	410	1.87	9.80	19

Table 23 (Continued) Newspapers: Publishing, Publishing and Printing, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Letterset Press Operators-Sheet, Roll, or Web Fed	100	.46	3.20	3
Linecasting Machine Keyboard Operators	240	1.11	32.89	17
Linecasting Machine Operators	90	.39	22.50	9
Linecasting Machine Tenders	220	.98	29.64	28
Mailers	830	3.79	7.68	47
Maintenance Repairers, General Utility	50	.22	17.07	8
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	820	3.73	48.71	47
Pasteup Men	740	3.37	13.31	41
Photoengravers	70	.29	23.58	10
Phototypesetter Operators	240	1.07	29.65	22
Phototypesetting Machine Keyboard Operators	280	1.28	44.81	28
Phototypesetting Machine Monitors	60	.26	15.52	15
Platemakers	100	.46	31.77	25
Press Assistants and Feeders	100	.45	36.31	16
Production Packagers, Hand or Machine	60	.26	13.49	5
Proofreaders, Composed Copy	490	2.25	29.09	47
Truck Drivers	230	1.05	5.41	13
All Other Skilled Craftsmen and Kindred Workers	490	2.25	na	na
All Other Operatives and Semi-skilled Workers	260	1.21	na	na
All Other Laborers and Unskilled Workers	320	1.45	na	na
CLERICAL OCCUPATIONS, TOTAL	4,790	21.83	na	na
Clerical Supervisors, Office or Plant	130	.57	24.01	11
Accounting Clerks	260	1.20	34.86	41
Bookkeepers, Hand	510	2.30	15.67	54
Bookkeeping and Billing Machine Operators	30	.14	11.20	15
Cashiers	30	.15	8.59	16

Table 23 (Continued) Newspapers: Publishing, Publishing and Printing, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Circulation Clerks..............	400	1.81	14.66	36
Classified-Ad Clerks, Newspaper.	170	.79	15.74	26
Computer Operators..............	30	.15	46.52	11
Customer Service Representatives, Printing and Publishing	60	.25	3.75	7
File Clerks.....................	70	.33	26.44	8
General Clerks, Office..........	630	2.86	18.88	44
Keypunch Operators..............	40	.19	18.57	9
Messengers......................	110	.51	31.08	19
Order Clerks....................	190	.85	1.38	9
Payroll and/or Timekeeping Clerks........................	30	.13	10.90	16
Production Clerks and/or Coordinators..................	40	.16	6.67	7
Secretaries.....................	540	2.47	22.62	55
Switchboard Operator-Receptionists................	80	.35	46.40	22
Telephone Ad-Takers, Newspaper..	500	2.28	18.29	29
Typists.........................	390	1.76	34.85	34
All Other Office Machine Operators.....................	150	.69	na	na
All Other Office Clerical Workers......................	280	1.27	na	na
All Other Plant Clerical Workers	120	.53	na	na
SALES OCCUPATIONS, TOTAL..........	2,370	10.83	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	2,270	10.38	8.28	82
All Other Sales Workers.........	100	.44	na	na

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..................................	88
Writers and/or Editors.................................	87
Sales Representatives, Sales Agents, and/or Sales Associates..	82
Reporters and Correspondents...........................	72
Secretaries..	55

Table 24
SIC 275
Commercial Printing
Statewide

This group includes establishments primarily engaged in commercial printing--letterpress, screen, gravure, or lithographic process. Also included are establishments engaged in engraving and etching steel, copper, wood, or rubber plates. These plates are used in printing stationery, cards, maps, illustrations, posters, etc.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	16,530	100.00	na	na
MANAGERS AND OFFICERS	1,780	10.78	4.26	81
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	360	2.17	na	na
Accountants and Auditors	30	.18	19.74	3
Commercial Artists	140	.83	21.78	8
Estimators, Printing Services	50	.30	19.12	7
Purchasing Agents and/or Buyers	50	.29	19.21	6
All Other Professional and Technical Workers	90	.55	na	na
SERVICE OCCUPATIONS, TOTAL	220	1.35	na	na
Janitors, Porters, and Cleaners	210	1.28	8.64	22
All Other Service Workers	[2]			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	10,810	65.40	na	na
Supervisors, Nonworking	340	2.03	8.83	26
Bindery Workers, Assembly	750	4.52	17.89	31
Bindery Workers, Stitching	170	1.01	13.52	13
Bookbinders, Hand	160	.96	15.29	8
Bookbinders, Machine	270	1.62	12.84	18
Camera Operators, Printing	530	3.22	5.98	50
Cutters, Machine	60	.36	25.87	5
Delivery and Route Workers	420	2.52	8.23	38
Etchers and/or Engravers	70	.43	29.34	2
Flexographic Press Operators	30	.19	49.10	1

Table 24 (Continued) Commercial Printing, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Hand Compositors................	280	1.70	9.99	13
Imposers and Makeup Arrangers...	130	.81	18.96	11
Inspectors.....................	100	.62	36.27	3
Letter Press Operators-Sheet, Roll, or Web Fed..............	980	5.93	12.07	46
Linecasting Machine Keyboard Operators....................	40	.26	36.30	3
Linecasting Machine Operators...	280	1.66	12.00	18
Linecasting Machine Tenders.....	60	.36	20.34	8
Mailers........................	190	1.15	47.26	6
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed..........................	2,380	14.40	5.31	79
Pasteup Men....................	90	.55	19.03	7
Photoengravers..................	140	.85	31.33	7
Phototypesetter Operators.......	90	.52	18.43	6
Phototypesetting Machine Keyboard Operators..............	40	.21	45.60	2
Platemakers.....................	310	1.87	10.19	28
Press Assistants and Feeders....	650	3.93	13.45	25
Production Packagers, Hand or Machine......................	40	.23	26.11	2
Proofreaders, Composed Copy.....	180	1.08	11.08	12
Screen or Stencil Printers and/or Setters...............	110	.66	33.38	4
Setters, Bindery Machines.......	120	.69	23.59	10
Strippers......................	450	2.72	9.31	31
Truck Drivers..................	40	.26	27.59	3
All Other Bindery Workers.......	560	3.35	na	na
All Other Skilled Craftsmen and Kindred Workers..............	270	1.63	na	na
All Other Operatives and Semiskilled Workers..............	300	1.83	na	na
All Other Laborers and Unskilled Workers......................	180	1.11	na	na
CLERICAL OCCUPATIONS, TOTAL.......	2,420	14.60	na	na
Accounting Clerks..............	150	.91	11.80	15
Bookkeepers, Hand..............	290	1.73	7.29	34
Customer Service Representatives, Printing and Publishing	50	.27	19.92	3

Table 24 (Continued) Commercial Printing, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
General Clerks, Office..........	550	3.33	7.25	41
Order Clerks....................	30	.19	31.12	2
Payroll and/or Timekeeping Clerks......................	30	.19	34.99	3
Production Clerks and/or Coordinators..................	40	.24	21.77	3
Secretaries.....................	360	2.16	7.76	36
Shipping and/or Receiving Clerks	450	2.73	11.03	31
Shipping Packers................	70	.40	26.37	4
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	50	.27	28.76	3
Typists.........................	140	.85	13.10	15
All Other Clerical Workers......	210	1.27	na	na
SALES OCCUPATIONS, TOTAL..........	940	5.70	na	na
Sales Clerks....................	50	.27	32.45	2
Sales Representatives, Sales Agents, and/or Sales Associates....................	890	5.40	9.48	43

[1] Based on unrounded data.

[2] Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	81
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed..	79
Camera Operators, Printing...........................	50
Letter Press Operators-Sheet, Roll, or Web Fed.......	46
Sales Representatives, Sales Agents, and/or Sales Associates...	43

Table 25
SIC 276
Manifold Business Forms
Statewide

This group includes establishments primarily engaged in designing and printing, by any process, special forms for use in the operation of a business, in single and multiple sets, including carbonized or interleaved with carbon, or otherwise processed for multiple reproduction.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,440	100.00	na	na
MANAGERS AND OFFICERS.............	280	8.19	4.26	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	100	2.89	na	na
SERVICE OCCUPATIONS, TOTAL........	50	1.52	na	na
Janitors, Porters, and Cleaners.	40	1.19	7.63	44
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,000	58.23	na	na
Supervisors, Nonworking.........	80	2.26	4.82	52
Bindery Workers, Assembly.......	170	4.90	9.79	41
Bookbinders, Machine............	80	2.38	14.18	30
Camera Operators, Printing......	30	.98	14.24	56
Industrial Truck Operators......	30	.87	9.64	22
Letter Press Operators-Sheet, Roll, or Web Fed.............	60	1.65	34.29	41
Mechanics, Maintenance..........	30	.92	4.05	22
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed........................	470	13.62	3.71	85
Pasteup Men.....................	60	1.62	14.84	30
Platemakers.....................	40	1.07	12.37	63
Press Assistants and Feeders....	100	2.81	5.94	37
Production Packagers, Hand or Machine......................	40	1.13	19.04	22

Table 25 (Continued) Manifold Business Forms, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Strippers	50	1.42	9.99	56
All Other Bindery Workers	150	4.40	na	na
All Other Skilled Craftsmen and Kindred Workers	170	4.96	na	na
All Other Operatives and Semi-skilled Workers	330	9.68	na	na
All Other Laborers and Unskilled Workers	110	3.33	na	na
CLERICAL OCCUPATIONS, TOTAL	850	24.50	na	na
Accounting Clerks	50	1.42	10.40	44
Customer Service Representatives, Printing and Publishing	50	1.30	25.71	22
General Clerks, Office	90	2.67	9.72	59
Keypunch Operators	40	1.19	0.00	22
Order Clerks	80	2.41	1.44	26
Production Clerks and/or Coordinators	40	1.19	6.00	33
Secretaries	70	2.00	7.40	63
Shipping and/or Receiving Clerks	60	1.74	7.84	59
All Other Office Machine Operators	60	1.75	na	na
All Other Office Clerical Workers	230	6.56	na	na
All Other Plant Clerical Workers	80	2.19	na	na
SALES OCCUPATIONS, TOTAL	160	4.58	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	160	4.58	9.88	59

1/ Based on unrounded data.

2/ Estimate below cut-off level so occupations will not add to category total.

Table 25 (Continued) Manifold Business Forms, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Offset Lithographic Press Operators-Sheet, Roll, or Web Fed	85
Platemakers	63
Secretaries	63
General Clerks, Office	59
Sales Representatives, Sales Agents, and/or Sales Associates	59
Shipping and/or Receiving Clerks	59

SIC 28
CHEMICALS AND ALLIED PRODUCTS

The Chemical Industry in Texas contributed more to the State's economy than any other class of manufacturing. Texas' long-time position as the Nation's leading oil and gas producing state is largely responsible for the importance of chemical production, for more than two-thirds of the output of the industry is of petroleum based compounds or petrochemicals.

The Industrial Organic Chemicals segment is the largest contributor of employment with 33,530. This represents 45 percent of the total Chemical Industry employment of 74,600 as of June 1977. Industrial Organic Chemicals (mainly petroleum based) are generally not considered consumer goods--they are products that undergo further processing before their ultimate use. Paints, Drugs, and Miscellaneous Chemical Products are also turned out in large volume by the Texas Chemical Industry.

Most of the largest plants producing bulk chemicals are located in the port areas along the Gulf Coast--Houston, Galveston, Beaumont, and Corpus Christi--where economic shipping is available.

The blue-collar Maintenance and Production occupational category claimed the largest proportion of this industry's employment in 1977. In Organic Chemicals, Chemical Operations represent the largest group.

A high percentage of the employment in the Chemical Industry is in firms that manufacture organic materials for textiles, consequently, supply and demand factors on raw materials will have a definite impact on the Chemical Industry's employment over the next decade.

Annual Average Employment for Chemicals and Allied Products*

1975	68,100
1976	71,700
1977	73,600

*Source: Current Employment Statistics Program.

Table 26
SIC 28
Chemicals and Allied Products
Dallas-Fort Worth SMSA

This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, dry colors, and pigments; (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	8,910	100.00	na	na
MANAGERS AND OFFICERS.............	1,120	12.61	2.35	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	930	10.49	na	na
Accountants and Auditors........	90	.97	9.28	35
Biological Science Technicians..	40	.44	25.50	10
Biological Scientists..........	50	.50	27.73	4
Chemical Engineers.............	30	.34	15.03	16
Chemists.......................	240	2.64	9.81	48
Computer Programmers...........	40	.49	2.35	10
Purchasing Agents and/or Buyers.	40	.49	8.82	24
All Other Engineers............	30	.35	na	na
All Other Science Technicians...	120	1.39	na	na
All Other Professional Workers..	150	1.67	na	na
All Other Technical Workers.....	100	1.17	na	na
SERVICE OCCUPATIONS, TOTAL........	190	2.11	na	na
Janitors, Porters, and Cleaners.	140	1.53	6.78	31
All Other Service Workers.......	50	.57	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,780	42.40	na	na
Supervisors, Nonworking.........	250	2.76	5.64	45
Chemical Operators-A............	50	.58	30.51	11
Chemical Operators-B............	50	.50	28.86	7

Table 26 (Continued) Chemicals and Allied Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials	50	.60	43.80	12
Industrial Truck Operators	160	1.82	6.16	27
Inspectors	70	.83	9.21	14
Machinists	50	.57	19.38	12
Maintenance Repairers, General Utility	60	.69	16.07	22
Mechanics, Maintenance	90	.99	13.24	19
Mixers and/or Blenders, Chemicals and Chemical Products	550	6.12	7.93	70
Order Fillers	170	1.94	5.96	24
Production Packagers, Hand or Machine	960	10.71	5.44	49
Tinters	80	.87	9.50	17
Truck Drivers	150	1.69	12.77	43
All Other Skilled Craftsmen and Kindred Workers	140	1.56	na	na
All Other Operatives and Semi-skilled Workers	420	4.75	na	na
All Other Laborers and Unskilled Workers	480	5.35	na	na
CLERICAL OCCUPATIONS, TOTAL	1,950	21.82	na	na
Clerical Supervisors, Office or Plant	40	.46	14.67	13
Accounting Clerks	230	2.54	9.97	47
Bookkeepers, Hand	30	.34	20.30	18
General Clerks, Office	280	3.09	15.70	40
Keypunch Operators	60	.68	12.76	14
Order Clerks	130	1.43	14.95	40
Secretaries	440	4.89	6.09	67
Shipping and/or Receiving Clerks	150	1.70	15.75	45
Shipping Packers	110	1.24	6.95	35
Stock Clerks-Stockroom, Warehouse, or Storage Yard	60	.71	19.62	16
Switchboard Operator-Receptionists	30	.33	7.49	19
Typists	110	1.18	6.08	34
All Other Office Machine Operators	40	.46	na	na
All Other Clerical Workers	240	2.69	na	na

Table 26 (Continued) Chemicals and Allied Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	940	10.57	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	930	10.43	6.57	64
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	93
Mixers and/or Blenders, Chemicals and Chemical Products..	70
Secretaries..	67
Sales Representatives, Sales Agents, and/or Sales Associates......................................	64
Production Packagers, Hand or Machine...............	49

Table 27
SIC 28
Chemicals and Allied Products
Corpus Christi SMSA

This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, dry colors, and pigments; (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	3,490	100.00	na	na
MANAGERS AND OFFICERS	250	7.20	0.00	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	500	14.11	na	na
Chemical Engineers	110	3.21	0.00	63
Chemists	70	2.03	0.00	75
Mechanical Engineers	60	1.57	0.00	63
All Other Engineers	50	1.41	na	na
All Other Professional and Technical Workers	210	5.88	na	na
SERVICE OCCUPATIONS	40	1.03	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,460	70.61	na	na
Supervisors, Nonworking	310	8.87	0.00	75
Chemical Operators-A	380	10.88	0.00	50
Electricians	50	1.49	0.00	38
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials	50	1.43	0.00	38
Instrument Mechanics	60	1.57	0.00	38
Machinists	80	2.23	0.00	38

Table 27 (Continued) Chemicals and Allied Products, Corpus Christi SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Maintenance Repairers, General Utility	30	.97	0.00	50
Mechanics, Maintenance	210	6.14	0.00	38
Plumbers and/or Pipefitters	70	2.06	0.00	38
Testers	50	1.40	0.00	38
Welders and Flamecutters	70	2.06	0.00	38
All Other Skilled Craftsmen and Kindred Workers	250	7.08	na	na
All Other Operatives and Semiskilled Workers	560	16.03	na	na
All Other Laborers and Unskilled Workers	290	8.37	na	na
CLERICAL OCCUPATIONS, TOTAL	230	6.68	na	na
Secretaries	80	2.38	0.00	75
Stock Clerks-Stockroom, Warehouse, or Storage Yard	30	.86	0.00	63
All Other Clerical Workers	120	3.44	na	na
SALES OCCUPATIONS	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	100
Chemists	75
Secretaries	75
Supervisors, Nonworking	75

Table 28
SIC 283
Drugs
Statewide

This group includes establishments primarily engaged in manufacturing, fabricating, or processing medicinal chemicals and pharmaceutical products. Also included in this group are establishments primarily engaged in the grading, grinding, and milling of botanicals.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,920	100.00	na	na
MANAGERS AND OFFICERS.............	470	12.04	7.67	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	680	17.37	na	na
Accountants and Auditors........	30	.81	3.27	29
Biological Scientists...........	70	1.65	23.72	38
Chemical Engineers..............	70	1.65	7.01	19
Chemists........................	120	3.11	17.68	57
All Other Engineers.............	30	.84	na	na
All Other Professional and Technical Workers.............	360	9.27	na	na
SERVICE OCCUPATIONS, TOTAL........	90	2.30	na	na
Janitors, Porters, and Cleaners.	60	1.63	27.42	48
All Other Service Workers.......	30	.66	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,900	48.56	na	na
Supervisors, Nonworking.........	210	5.25	18.67	48
Chemical Operators-A............	270	6.94	12.30	14
Mixers and/or Blenders, Chemicals and Chemical Products......................	60	1.45	42.34	48
Production Packagers, Hand or Machine	510	13.09	12.53	76

Table 28 (Continued) Drugs, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
All Other Skilled Craftsmen and Kindred Workers..............	350	8.91	na	na
All Other Operatives and Semi-skilled Workers..............	250	6.49	na	na
All Other Laborers and Unskilled Workers......................	250	6.39	na	na
CLERICAL OCCUPATIONS, TOTAL.......	650	16.45	na	na
Accounting Clerks..............	60	1.58	22.05	48
General Clerks, Office..........	110	2.73	21.07	38
Secretaries.....................	180	4.64	13.66	57
Shipping and/or Receiving Clerks	50	1.35	31.52	43
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	40	.96	4.60	19
All Other Office Clerical Workers......................	160	4.01	na	na
All Other Plant Clerical Workers	50	1.15	na	na
SALES OCCUPATIONS, TOTAL..........	130	3.26	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	130	3.26	31.29	33

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	100
Production Packagers, Hand or Machine................	76
Chemists...	57
Secretaries..	57

Table 29
SIC 285
Paints, Varnishes, Lacquers, Enamels, and Allied Products
Statewide

This group includes establishments primarily engaged in manufacturing paints (in paste and ready mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers and sealers; paint and varnish removers; paint brush cleaners; and allied paint products.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,840	100.00	na	na
MANAGERS AND OFFICERS.............	280	7.18	4.64	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	250	6.50	na	na
Accountants and Auditors........	40	.98	14.20	45
Chemists........................	110	2.91	9.92	64
All Other Professional and Technical Workers............	100	2.60	na	na
SERVICE OCCUPATIONS, TOTAL........	70	1.69	na	na
Janitors, Porters, and Cleaners.	50	1.40	18.31	39
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,000	52.26	na	na
Supervisors, Nonworking.........	140	3.59	10.32	59
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials.....................	50	1.27	23.90	23
Industrial Truck Operators......	110	2.86	17.59	32
Maintenance Repairers, General Utility......................	40	1.14	21.90	30
Mixers and/or Blenders, Chemicals and Chemical Products.....................	330	8.59	7.69	89

Table 29 (Continued) Paints, Varnishes, Lacquers, Enamels, and Allied Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Order Fillers	170	4.50	16.13	36
Production Packagers, Hand or Machine	260	6.87	7.10	61
Tinters	120	3.12	6.82	73
Truck Drivers	90	2.21	17.27	50
All Other Skilled Craftsmen and Kindred Workers	200	5.28	na	na
All Other Operatives and Semiskilled Workers	270	7.07	na	na
All Other Laborers and Unskilled Workers	220	5.80	na	na
CLERICAL OCCUPATIONS, TOTAL	730	19.31	na	na
Accounting Clerks	70	1.74	13.10	48
Bookkeepers, Hand	30	.83	18.55	27
General Clerks, Office	90	2.39	10.95	48
Keypunch Operators	30	.83	9.48	20
Order Clerks	60	1.51	13.92	48
Secretaries	60	1.61	13.83	57
Shipping and/or Receiving Clerks	90	2.44	6.66	68
Shipping Packers	80	2.03	19.97	55
Stock Clerks-Stockroom, Warehouse, or Storage Yard	30	.88	20.38	20
All Other Office Clerical Workers	140	3.69	na	na
All Other Plant Clerical Workers	50	1.35	na	na
SALES OCCUPATIONS, TOTAL	510	13.07	na	na
Sales Clerks	80	2.00	40.51	20
Sales Representatives, Sales Agents, and/or Sales Associates	430	11.09	9.71	75

1/ Based on unrounded data.

2/ Estimate below cut-off level so occupations will not add to category total.

Table 29 (Continued) Paints, Varnishes, Lacquers, Enamels, and Allied Products, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Mixers and/or Blenders, Chemicals and Chemical Products	89
Sales Representatives, Sales Agents, and/or Sales Associates	75
Tinters	73
Shipping and/or Receiving Clerks	68

Table 30
SIC 286
Industrial Organic Chemicals
Statewide

This group includes establishments primarily engaged in manufacturing industrial organic chemicals. Important products in this group include: non-cyclic organic chemicals; solvents; polyhydric alcohols; synthetic perfume and flavoring materials; rubber processing chemicals; cyclic and acyclic plasticizers; synthetic tanning agents; chemical warfare gases; esters, amines, etc. of polyhydric alcohols and fatty and other acids; cyclic crudes and intermediates; cyclic dyes and organic pigments; and natural gum and wood chemicals.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	33,530	100.00	na	na
MANAGERS AND OFFICERS	2,200	6.56	7.06	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	5,480	16.36	na	na
Accountants and Auditors	180	.52	11.77	65
Chemical Engineers	1,290	3.85	9.00	80
Chemists	570	1.70	9.11	85
Civil Engineers	40	.11	19.50	28
Computer Programmers	60	.16	18.97	33
Drafters	110	.31	11.84	43
Electrical and Electronic Engineers	190	.55	10.95	50
Electrical and Electronic Technicians	80	.23	10.73	23
Industrial Engineers	60	.19	22.19	18
Mechanical Engineers	620	1.86	12.13	63
Nurses, Professional	40	.11	11.18	33
Personnel and Labor Relations Specialists	140	.40	10.00	60
Physical Science Technicians	310	.93	12.24	15
Purchasing Agents and/or Buyers	150	.43	10.81	68
Safety Engineers	50	.16	11.57	45
Systems Analysts, Electronic Data Processing	80	.23	15.52	30
All Other Engineering Technicians	660	1.96	na	na
All Other Engineers	80	.24	na	na
All Other Physical Scientists	30	.10	na	na
All Other Science Technicians	120	.36	na	na

Table 30 (Continued) Industrial Organic Chemicals, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
All Other Professional Workers	150	.45	na	na
All Other Technical Workers	470	1.40	na	na
SERVICE OCCUPATIONS, TOTAL	430	1.27	na	na
Supervisors, Nonworking-Service	60	.17	46.85	10
Guards and Doorkeepers	230	.69	14.62	25
Janitors, Porters, and Cleaners	110	.31	38.32	25
All Other Service Workers	30	.09	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	22,530	67.22	na	na
Supervisors, Nonworking	3,110	9.28	4.46	85
Boilermakers	130	.37	44.91	10
Carpenters	160	.47	20.33	18
Chemical Operator Helpers	600	1.79	24.21	18
Chemical Operators-A	5,990	17.88	11.21	65
Chemical Operators-B	1,890	5.64	27.84	45
Chief Operators	480	1.42	16.01	25
Crane, Derrick, and Hoist Operators	50	.14	20.10	15
Electricians	690	2.05	11.72	43
Inspectors	50	.15	26.06	18
Instrument Mechanics	1,020	3.03	7.50	58
Loaders, Tank Cars and/or Trucks	470	1.39	24.92	15
Machinists	730	2.17	18.49	25
Mechanics, Automotive	50	.14	34.40	13
Mechanics, Maintenance	1,670	5.00	13.16	40
Painters, Maintenance	100	.29	25.33	15
Plumbers and/or Pipefitters	980	2.93	16.33	28
Riggers	220	.64	41.74	10
Sheet Metal Workers	90	.27	32.19	10
Testers	150	.44	41.02	8
Truck Drivers	130	.38	33.16	28
Welders and Flamecutters	180	.52	20.53	23
All Other Mechanics and Repairers	70	.20	na	na
All Other Skilled Craftsmen and Kindred Workers	620	1.84	na	na
All Other Operatives and Semi-skilled Workers	2,310	6.91	na	na
All Other Laborers and Unskilled Workers	590	1.76	na	na

Table 30 (Continued) Industrial Organic Chemicals, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	2,810	8.36	na	na
Clerical Supervisors, Office or Plant........................	50	.14	22.58	25
Accounting Clerks...............	240	.72	10.73	65
Computer Operators..............	40	.10	19.34	23
General Clerks, Office..........	440	1.32	16.99	55
Keypunch Operators..............	90	.25	9.46	50
Order Clerks....................	110	.31	23.32	28
Payroll and/or Timekeeping Clerks........................	70	.21	28.02	55
Personnel Clerks................	60	.17	12.71	48
Procurement Clerks..............	60	.17	31.69	30
Production Clerks and/or Coordinators..................	150	.44	19.27	43
Secretaries.....................	470	1.39	9.03	93
Shipping and/or Receiving Clerks	70	.22	21.80	35
Stenographers...................	270	.80	16.19	38
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	280	.83	15.50	45
Typists.........................	90	.28	25.66	25
All Other Office Machine Operators.....................	50	.14	na	na
All Other Clerical Workers......	270	.81	na	na
SALES OCCUPATIONS, TOTAL..........	80	.22	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	80	.22	33.71	18

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	100
Secretaries..	93
Chemists...	85
Supervisors, Nonworking..............................	85
Chemical Engineers...................................	80

Table 31
SIC 289
Miscellaneous Chemical Products
Statewide

This group includes establishments primarily engaged in manufacturing industrial and household adhesives and sealants; explosives; printing ink; carbon black; and chemicals and chemical preparations, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	5,390	100.00	na	na
MANAGERS AND OFFICERS.............	530	9.88	3.45	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	710	13.15	na	na
Accountants and Auditors........	40	.72	15.62	22
Biological Science Technicians..	80	1.44	47.72	12
Chemical Engineers..............	110	2.11	24.77	24
Chemists........................	130	2.48	16.05	38
Mechanical Engineers............	50	.85	8.28	14
Physical Science Technicians....	70	1.29	15.19	5
Purchasing Agents and/or Buyers.	30	.55	4.94	16
All Other Engineers.............	40	.67	na	na
All Other Professional Workers..	60	1.08	na	na
All Other Technical Workers.....	100	1.93	na	na
SERVICE OCCUPATIONS, TOTAL........	70	1.32	na	na
Janitors, Porters, and Cleaners.	60	1.07	9.09	28
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,970	54.98	na	na
Supervisors, Nonworking.........	270	4.97	4.59	47
Carbon Black Makers.............	360	6.71	4.16	12
Chemical Operator Helpers.......	80	1.52	6.40	5
Chemical Operators-A............	110	1.98	14.09	12
Chemical Operators-B............	110	2.07	9.76	10
Electricians....................	70	1.22	2.21	14

Table 31 (Continued) Miscellaneous Chemical Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials	50	.83	9.70	9
Industrial Truck Operators	40	.79	16.64	21
Instrument Mechanics	30	.59	13.45	9
Maintenance Repairers, General Utility	110	2.09	13.47	24
Mechanics, Maintenance	80	1.50	12.00	22
Mixers and/or Blenders, Chemicals and Chemical Products	370	6.88	13.03	55
Production Packagers, Hand or Machine	370	6.86	12.00	33
Testers	30	.57	18.96	7
Tinters	30	.55	20.81	9
Truck Drivers	140	2.56	13.83	45
Welders and Flamecutters	110	1.98	3.63	12
All Other Skilled Craftsmen and Kindred Workers	140	2.63	na	na
All Other Operatives and Semi-skilled Workers	210	3.88	na	na
All Other Laborers and Unskilled Workers	260	4.75	na	na
CLERICAL OCCUPATIONS, TOTAL	740	13.78	na	na
Accounting Clerks	90	1.72	12.13	38
General Clerks, Office	70	1.22	17.33	41
Order Clerks	50	.94	17.73	34
Secretaries	210	3.95	6.72	57
Shipping Packers	40	.70	18.83	24
Typists	70	1.35	17.27	29
All Other Office Clerical Workers	140	2.50	na	na
All Other Plant Clerical Workers	70	1.37	na	na
SALES OCCUPATIONS, TOTAL	370	6.90	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	370	6.90	10.94	57

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 31 (Continued) Miscellaneous Chemical Products, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Sales Representatives, Sales Agents, and/or Sales Associates	57
Secretaries	57
Mixers and/or Blenders, Chemicals and Chemical Products	55
Supervisors, Nonworking	47

SIC 29
PETROLEUM REFINING AND RELATED INDUSTRIES

This major industry group includes Petroleum Refining which employed 41,000 workers (92 percent) as of June 1977. The balance of the employment (8 percent) occurred in Paving and Roofing Materials and Miscellaneous Products of Petroleum and Coal.

Production and Maintenance was the largest group of occupations representing 70 percent of the total employment. The key occupations in this category are Refinery Operators and Refinery Operator Helpers. These occupations represent 7.93 percent and 5.52 percent of the employment, respectively.

Employment in Petroleum Refining is not expected to increase significantly through the mid-1980's. Refinery output is expected to increase to meet the Nation's growing demand for petroleum products, but automated, computerized plants, increased refining capacity, and improved refining techniques should make it possible for the industry to increase production without adding unneeded employees. Most jobs will be for Operators, Maintenance Workers, Administrators, and Technicians.

Average Annual Employment for Petroleum Refining and Related Industries*

1975	40,800
1976	42,900
1977	44,300

*Source: Current Employment Statistics Program.

Table 32
SIC 29
Petroleum Refining and Related Industries
Statewide

This major group includes establishments primarily engaged in refining petroleum, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Excluded are establishments primarily engaged in manufacturing and distributing gas to consumers, and those primarily engaged in producing coke and byproducts.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	44,450	100.00	na	na
MANAGERS AND OFFICERS	2,220	5.01	11.47	91
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	5,770	12.98	na	na
Accountants and Auditors	520	1.16	20.29	41
Chemical Engineers	690	1.55	7.20	33
Chemists	310	.70	10.95	37
Civil Engineers	100	.22	22.16	13
Computer Programmers	110	.25	18.73	17
Drafters	180	.41	8.41	21
Electrical and Electronic Engineers	120	.27	19.54	25
Electrical and Electronic Technicians	40	.09	12.41	9
Industrial Engineers	70	.14	13.09	15
Lawyers	40	.07	35.29	4
Mechanical Engineers	530	1.18	7.44	33
Nurses, Professional	60	.13	14.07	21
Personnel and Labor Relations Specialists	230	.52	7.06	32
Petroleum Engineers	110	.24	9.49	9
Purchasing Agents and/or Buyers	140	.32	8.18	36
Safety Engineers	110	.24	7.81	29
Science Technicians	270	.60	17.76	20
Statisticians	50	.10	39.95	8
Systems Analysts, Electronic Data Processing	130	.28	20.79	15
All Other Engineering Technicians	400	.89	na	na

Table 32 (Continued) Petroleum Refining and Related Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
All Other Engineers............	360	.80	na	na
All Other Mathematical Scientists..................	50	.11	na	na
All Other Professional Workers..	870	1.95	na	na
All Other Technical Workers.....	280	.63	na	na
SERVICE OCCUPATIONS, TOTAL........	820	1.85	na	na
Supervisors, Nonworking-Service.	40	.08	36.75	11
Guards and Doorkeepers..........	450	1.01	33.07	25
Janitors, Porters, and Cleaners.	200	.45	28.51	28
All Other Service Workers.......	130	.29	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	31,100	70.02	na	na
Supervisors, Nonworking.........	3,080	6.93	8.08	63
Asbestos and Insulation Workers.	240	.54	8.52	20
Asphalt Blenders...............	40	.08	24.58	5
Asphalt Plant Operators.........	60	.13	39.57	13
Boilermakers....................	680	1.52	22.78	16
Carpenters......................	420	.93	7.60	21
Chemical Operator Helpers.......	260	.59	43.57	11
Chemical Operators-A...........	1,090	2.45	30.93	24
Chemical Operators-B...........	460	1.03	22.36	9
Chief Operators................	610	1.38	18.25	15
Coaters, Roofing Felt..........	180	.40	5.24	12
Compounders....................	150	.34	23.67	16
Control Panel Operators, Petroleum....................	680	1.52	28.10	12
Crane, Derrick, and Hoist Operators....................	290	.65	11.56	17
Dispatchers, Refinery..........	90	.20	37.81	11
Electricians...................	790	1.77	6.31	33
Extractor Operators and/or Extractor Plant Operators.....	410	.93	41.56	5
Filter and/or Filter Press Operators....................	90	.19	38.74	4
Gagers.........................	310	.69	26.11	17
Greasemakers...................	60	.13	32.48	9
Heavy Equipment Operators.......	410	.91	26.15	24
Helpers, Trades.................	1,630	3.66	13.41	24
Industrial Truck Operators......	270	.60	17.17	25

Table 32 (Continued) Petroleum Refining and Related Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Inspectors	110	.24	18.40	17
Instrument Fitters	60	.12	22.22	5
Instrument Mechanics	850	1.91	7.45	29
Loaders, Tank Cars and/or Trucks	330	.73	25.87	28
Machinists	1,200	2.69	16.08	23
Maintenance Repairers, General Utility	300	.67	10.64	33
Mechanics, Automotive	150	.34	10.92	23
Mechanics, Maintenance	1,100	2.47	23.95	33
Order Fillers	90	.21	27.97	12
Painters, Maintenance	370	.83	8.40	23
Plumbers and/or Pipefitters	1,600	3.61	6.05	23
Production Packagers, Hand or Machine	390	.87	21.95	13
Pump Operator Helpers	380	.85	44.24	9
Pump Operators	500	1.12	18.50	21
Refinery Operator Helpers, Petroleum	2,260	5.09	19.62	20
Refinery Operators, Petroleum	3,250	7.33	9.34	31
Riggers	210	.48	32.10	7
Sheet Metal Workers	70	.15	27.22	8
Stationary Boiler Firers	150	.32	34.60	11
Stationary Engineers	310	.69	30.38	12
Still Operators, Asphalt	60	.13	33.79	13
Testers	830	1.86	4.93	31
Treaters	130	.30	31.10	9
Truck Drivers	780	1.75	27.01	43
Welders and Flamecutters-A	680	1.52	8.19	23
All Other Mechanics and Repairers	70	.15	na	na
All Other Skilled Craftsmen and Kindred Workers	250	.56	na	na
All Other Operatives and Semi-skilled Workers	820	1.84	na	na
All Other Laborers and Unskilled Workers	1,500	3.39	na	na
CLERICAL OCCUPATIONS, TOTAL	4,350	9.71	na	na
Clerical Supervisors, Office or Plant	460	1.04	28.17	31
Accounting Clerks	310	.68	10.85	48

Table 32 (Continued) Petroleum Refining and Related Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Bookkeeping and/or Billing Machine Operators.............	50	.11	38.94	12
Computer Operators..............	80	.17	21.30	16
File Clerks.....................	80	.17	21.05	16
General Clerks, Office..........	570	1.27	9.15	37
Keypunch Operators..............	220	.48	26.61	23
Order Clerks....................	40	.08	14.76	17
Payroll and/or Timekeeping Clerks........................	100	.22	17.36	41
Personnel Clerks................	110	.24	11.06	31
Procurement Clerks..............	80	.18	13.21	21
Production Clerks and/or Coordinators..................	70	.14	13.73	27
Receptionists...................	50	.10	28.11	12
Secretaries.....................	750	1.69	19.24	55
Shipping and/or Receiving Clerks	90	.19	12.42	20
Shipping Packers................	110	.25	49.94	11
Statistical Clerks..............	40	.09	17.73	13
Stenographers...................	370	.83	23.35	21
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	230	.52	12.20	31
Switchboard Operator-Receptionists................	50	.10	17.96	31
Switchboard Operators...........	30	.07	9.42	13
Typists.........................	110	.24	8.51	23
All Other Office Machine Operators.....................	100	.22	na	na
All Other Office Clerical Workers......................	160	.35	na	na
All Other Plant Clerical Workers......................	90	.19	na	na
SALES OCCUPATIONS, TOTAL.........	190	.41	na	na
Sales Representatives, Sales Agents, and/or Sales Associates..................	190	.41	16.84	25

[1] Based on unrounded data.

Table 32 (Continued) Petroleum Refining and Related Industries, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	91
Supervisors, Nonworking	63
Secretaries	55
Accounting Clerks	48
Truck Drivers	43

Table 33
SIC 29
Petroleum Refining and Related Industries
Dallas-Fort Worth SMSA

This major group includes establishments primarily engaged in refining petroleum, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Excluded are establishments primarily engaged in manufacturing and distributing gas to consumers, and those primarily engaged in producing coke and byproducts.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,260	100.00	na	na
MANAGERS AND OFFICERS.............	200	8.84	7.76	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	70	3.14	na	na
SERVICE OCCUPATIONS..............	[2]			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,570	68.80	na	na
Supervisors, Nonworking.........	80	3.54	9.93	53
Coaters, Roofing Felt...........	130	5.56	5.37	24
Helpers, Trades.................	190	8.18	20.75	24
Industrial Truck Operators......	90	3.89	13.53	47
Maintenance Repairers, General Utility.....................	50	2.10	17.39	41
Production Packagers, Hand or Machine......................	80	3.59	28.73	18
Truck Drivers...................	120	5.21	15.25	65
All Other Skilled Craftsmen and Kindred Workers..............	210	9.24	na	na
All Other Operatives and Semi-skilled Workers..............	290	12.81	na	na
All Other Laborers and Unskilled Workers......................	330	14.36	na	na

Table 33 (Continued) Petroleum Refining and Related Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	340	15.51	na	na
Accounting Clerks...............	30	1.44	23.80	65
Secretaries.....................	40	1.75	21.59	65
Typists.........................	30	1.48	6.73	18
All Other Clerical Workers......	240	10.78	na	na
SALES OCCUPATIONS, TOTAL..........	60	2.45	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	60	2.45	18.54	41

1/ Based on unrounded data.

2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	100
Accounting Clerks..................................	65
Secretaries..	65
Truck Drivers......................................	65
Supervisors, Nonworking............................	53

Table 34
SIC 29
Petroleum Refining and Related Industries
Houston SMSA

This major group includes establishments primarily engaged in refining petroleum, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Excluded are establishments primarily engaged in manufacturing and distributing gas to consumers, and those primarily engaged in producing coke and byproducts.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	16,580	100.00	na	na
MANAGERS AND OFFICERS	1,250	7.56	18.44	89
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	3,250	19.53	na	na
Accountants and Auditors	430	2.57	24.59	58
Chemical Engineers	290	1.73	12.78	32
Chemists	110	.68	9.35	42
Civil Engineers	70	.39	32.76	21
Computer Programmers	80	.45	26.15	26
Drafters	80	.45	19.98	26
Electrical and Electronic Engineers	40	.22	18.96	32
Mechanical Engineers	200	1.20	18.49	47
Personnel and Labor Relations Specialists	130	.79	10.05	42
Purchasing Agents and/or Buyers	80	.50	8.57	47
Safety Engineers	40	.24	17.32	42
Science Technicians	220	1.32	21.46	21
Systems Analysts, Electronic Data Processing	110	.65	24.19	26
All Other Engineering Technicians	260	1.59	na	na
All Other Engineers	300	1.83	na	na
All Other Professional Workers	620	3.72	na	na
All Other Technical Workers	190	1.13	na	na
SERVICE OCCUPATIONS, TOTAL	210	1.29	na	na
Guards and Doorkeepers	130	.79	11.40	37
Janitors, Porters, and Cleaners	70	.43	44.59	26
All Other Service Workers	2/			

Table 34 (Continued) Petroleum Refining and Related Industries, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	9,430	56.90	na	na
Supervisors, Nonworking.........	1,190	7.19	15.77	68
Asbestos and Insulation Workers.	70	.42	15.64	26
Boilermakers....................	240	1.46	14.75	26
Carpenters......................	140	.83	13.68	32
Chemical Operator Helpers.......	140	.86	29.49	16
Chemical Operators-A............	650	3.90	29.73	26
Chief Operators.................	280	1.67	32.50	21
Coaters, Roofing Felt...........	50	.28	12.75	16
Compounders.....................	60	.34	28.75	21
Crane, Derrick, and Hoist Operators.....................	40	.25	23.97	32
Electricians....................	320	1.94	13.79	42
Heavy Equipment Operators.......	90	.51	41.50	32
Helpers, Trades.................	250	1.50	22.53	21
Industrial Truck Operators......	80	.50	29.23	26
Inspectors......................	50	.30	27.54	21
Instrument Mechanics............	340	2.06	13.98	32
Loaders, Tank Cars and/or Trucks........................	70	.41	20.33	26
Machinists......................	500	3.02	13.11	32
Maintenance Repairers, General Utility.......................	50	.30	4.35	26
Mechanics, Automotive...........	60	.36	18.76	21
Mechanics, Maintenance..........	30	.19	40.56	16
Order Fillers...................	40	.22	30.42	16
Painters, Maintenance...........	110	.63	20.59	32
Plumbers and/or Pipefitters.....	550	3.32	14.86	32
Pump Operators..................	210	1.24	16.17	26
Refinery Operator Helpers, Petroleum......................	560	3.40	16.49	21
Refinery Operators, Petroleum...	1,170	7.07	16.37	32
Riggers.........................	140	.82	33.80	16
Stationary Engineers............	90	.53	24.56	21
Testers.........................	140	.85	17.83	32
Truck Drivers...................	160	.98	32.28	42
Welders and Flamecutters-A......	200	1.21	16.76	32
All Other Skilled Craftsmen and Kindred Workers...............	120	.72	na	na
All Other Operatives and Semi-skilled Workers...............	850	5.13	na	na
All Other Laborers and Unskilled Workers.......................	390	2.31	na	na

Table 34 (Continued) Petroleum Refining and Related Industries, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	2,340	14.14	na	na
Clerical Supervisors, Office or Plant.........................	360	2.16	36.04	42
Accounting Clerks...............	170	1.04	16.24	63
Computer Operators..............	50	.31	29.60	26
File Clerks.....................	40	.26	35.45	26
General Clerks, Office..........	170	1.00	15.30	42
Keypunch Operators..............	170	1.03	33.50	37
Payroll and/or Timekeeping Clerks.......................	30	.19	16.15	42
Personnel Clerks................	70	.39	13.51	32
Procurement Clerks..............	50	.28	17.87	26
Production Clerks and/or Coordinators.................	40	.21	20.89	37
Receptionists...................	40	.22	33.16	26
Secretaries.....................	510	3.09	27.51	58
Stenographers...................	260	1.57	32.74	37
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	90	.55	22.78	37
Typists.........................	50	.31	13.03	32
All Other Office Machine Operators.....................	60	.34	na	na
All Other Office Clerical Workers......................	120	.73	na	na
All Other Plant Clerical Workers	60	.38	na	na
SALES OCCUPATIONS, TOTAL..........	100	.59	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	90	.55	31.93	37
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	89
Supervisors, Nonworking..............................	68
Accounting Clerks....................................	63
Accountants and Auditors.............................	58
Secretaries..	58

Table 35
SIC 29
Petroleum Refining and Related Industries
Corpus Christi SMSA

This major group includes establishments primarily engaged in refining petroleum, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Excluded are establishments primarily engaged in manufacturing and distributing gas to consumers, and those primarily engaged in producing coke and byproducts.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,030	100.00	na	na
MANAGERS AND OFFICERS............	80	4.07	28.67	75
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	220	10.67	na	na
Chemical Engineers.............	40	1.88	2.41	38
Chemists.......................	30	1.29	10.57	38
Mechanical Engineers...........	30	1.63	4.62	38
All Other Engineers............	30	1.39	na	na
All Other Professional and Technical Workers............	90	4.47	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,610	79.21	na	na
Supervisors, Nonworking.........	140	7.00	7.38	50
Instrument Mechanics...........	40	1.83	43.13	38
Mechanics, Maintenance..........	220	10.82	27.16	63
Pump Operators.................	50	2.23	23.32	38
Refinery Operators, Petroleum...	310	15.49	32.42	38
Testers........................	110	5.36	6.91	38
All Other Skilled Craftsmen and Kindred Workers..............	100	4.86	na	na
All Other Operatives and Semi-skilled Workers..............	540	26.70	na	na
All Other Laborers and Unskilled Workers.....................	100	4.91	na	na

Table 35 (Continued) Petroleum Refining and Related Industries, Corpus Christi SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	120	5.56	na	na
Secretaries.....................	30	1.24	6.76	50
All Other Clerical Workers......	90	4.32	na	na

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	75
Mechanics, Maintenance...............................	63
Secretaries..	50
Supervisors, Nonworking..............................	50

Table 36
SIC 291
Petroleum Refining
Statewide

This group includes establishments primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	41,040	100.00	na	na
MANAGERS AND OFFICERS	1,920	4.68	13.11	88
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	5,660	13.73	na	na
Accountants and Auditors	480	1.16	21.97	40
Chemical Engineers	690	1.67	7.23	52
Chemists	300	.72	11.58	52
Civil Engineers	100	.23	22.74	21
Computer Programmers	110	.27	19.04	29
Drafters	180	.43	8.41	36
Electrical and Electronic Engineers	120	.29	19.87	40
Electrical and Electronic Technicians	40	.10	12.41	17
Industrial Engineers	60	.14	13.40	21
Lawyers	40	.08	35.29	7
Mechanical Engineers	520	1.26	7.55	45
Nurses, Professional	60	.14	14.28	36
Personnel and Labor Relations Specialists	220	.54	7.30	45
Petroleum Engineers	110	.26	9.49	17
Purchasing Agents and/or Buyers	130	.31	8.70	40
Safety Engineers	110	.25	7.98	48
Science Technicians	250	.61	18.96	26
Statisticians	50	.10	41.66	12
Systems Analysts, Electronic Data Processing	130	.30	21.10	24
All Other Engineering Technicians	400	.97	na	na
All Other Engineers	360	.87	na	na

Table 36 (Continued) Petroleum Refining, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
All Other Mathematical Scientists....................	50	.11	na	na
All Other Physical Scientists...	300	.73	na	na
All Other Professional Workers..	570	1.39	na	na
All Other Technical Workers......	280	.68	na	na
SERVICE OCCUPATIONS, TOTAL........	790	1.90	na	na
Supervisors, Nonworking-Service.	40	.08	38.79	14
Guards and Doorkeepers..........	440	1.06	34.00	38
Janitors, Porters, and Cleaners.	180	.42	32.64	21
All Other Service Workers.......	130	.31	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	28,700	70.06	na	na
Supervisors, Nonworking.........	2,920	7.14	8.47	62
Asbestos and Insulation Workers.	240	.59	8.52	36
Boilermakers....................	680	1.65	22.78	29
Carpenters......................	420	1.01	7.62	36
Chemical Operator Helpers.......	260	.62	44.60	17
Chemical Operators-A............	1,080	2.62	31.30	38
Chemical Operators-B............	450	1.09	22.76	14
Chief Operators.................	610	1.49	18.25	26
Compounders.....................	130	.32	26.47	17
Control Panel Operators, Petroleum....................	680	1.65	28.10	21
Crain, Derrick, and Hoist Operators....................	280	.68	11.99	26
Dispatchers, Refinery...........	90	.21	37.81	19
Electricians....................	770	1.88	6.39	45
Extractor Operators and/or Extractor Plant Operators.....	410	1.01	41.56	10
Filter and/or Filter Press Operators....................	90	.21	38.74	7
Gagers..........................	310	.74	26.28	26
Greasemakers....................	50	.10	42.03	10
Heavy Equipment Operators.......	270	.65	32.51	24
Helpers, Trades.................	1,450	3.54	14.81	31
Industrial Truck Operators......	140	.33	30.25	10
Inspectors......................	80	.20	22.76	17
Instrument Fitters..............	60	.13	22.22	10

Table 36 (Continued) Petroleum Refining, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Instrument Mechanics............	850	2.06	7.45	50
Loaders, Tank Cars and/or Trucks	320	.77	26.52	38
Machinists.....................	1,190	2.90	16.17	33
Maintenance Repairers, General Utility.......................	240	.57	12.07	33
Mechanics, Automotive...........	140	.34	11.61	26
Mechanics, Maintenance..........	1,040	2.54	25.18	45
Order Fillers..................	80	.19	32.43	12
Painters, Maintenance...........	370	.90	8.42	38
Plumbers and/or Pipefitters.....	1,600	3.91	6.05	38
Production Packagers, Hand or Machine......................	300	.73	27.41	12
Pump Operator Helpers...........	380	.92	44.24	17
Pump Operators..................	500	1.20	18.57	36
Refinery Operator Helpers, Petroleum....................	2,260	5.52	19.62	36
Refinery Operators, Petroleum...	3,250	7.93	9.36	52
Riggers........................	210	.52	32.10	12
Sheet Metal Workers.............	70	.15	28.78	12
Stationary Boiler Firers........	140	.34	35.57	17
Stationary Engineers............	300	.74	30.96	19
Testers........................	820	2.01	4.96	45
Treaters.......................	130	.32	31.10	17
Truck Drivers..................	620	1.51	33.68	33
Welders and Flamecutters-A......	670	1.62	8.22	36
All Other Mechanics and Repairers.....................	60	.14	na	na
All Other Skilled Craftsmen and Kindred Workers..............	200	.48	na	na
All Other Operatives and Semi-skilled Workers..............	500	1.23	na	na
All Other Laborers and Unskilled Workers......................	990	2.42	na	na
CLERICAL OCCUPATIONS, TOTAL.......	3,870	9.39	na	na
Clerical Supervisors, Office or Plant........................	440	1.06	29.96	33
Accounting Clerks...............	270	.65	12.19	45
Bookkeeping and/or Billing Machine Operators............	40	.10	47.28	7

Table 36 (Continued) Petroleum Refining, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Computer Operators..............	80	.18	21.81	26
File Clerks.....................	50	.12	30.38	19
General Clerks, Office..........	540	1.32	9.49	45
Keypunch Operators..............	220	.52	26.85	38
Payroll and/or Timekeeping Clerks........................	80	.19	21.33	45
Personnel Clerks................	100	.24	11.38	43
Procurement Clerks..............	80	.19	14.00	29
Production Clerks and/or Coordinators..................	60	.13	14.79	33
Receptionists...................	40	.09	31.37	12
Secretaries.....................	710	1.72	20.41	64
Shipping and/or Receiving Clerks	70	.15	14.98	17
Statistical Clerks..............	30	.08	20.68	14
Stenographers...................	320	.78	26.95	26
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	220	.52	13.08	38
Switchboard Operator-Receptionists.................	40	.09	21.35	38
Typists.........................	70	.16	12.54	26
All Other Office Machine Operators.....................	80	.20	na	na
All Other Office Clerical Workers......................	170	.41	na	na
All Other Plant Clerical Workers	160	.40	na	na
SALES OCCUPATIONS, TOTAL..........	100	.23	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	100	.23	28.66	12

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..................................	88
Secretaries..	64
Supervisors, Nonworking................................	62
Chemical Engineers.....................................	52
Chemists...	52
Refinery Operators, Petroleum..........................	52

SIC 30
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS

In Texas, the Rubber and Miscellaneous Plastics Industry has approximately 26,600 employees working out of 555 establishments (June 1977). The manufacturing of tires and various other rubber products accounts for one-fourth of the total industry employment. The remaining three-fourths of the industry employment is concentrated in the published Miscellaneous Plastics segment. In this segment, the majority of occupations are in Production and Maintenance. Compression and/or Injection Molding Machine Operators is the dominant occupational category.

The Miscellaneous Plastics Industry has been one of the fastest growing industries in Texas and the United States. While employment has accelerated since 1970, long-term growth depends on the cost and availability of petrochemical feed stocks such as ethylene, propylene, butadiene, and benzene. From all indications, it appears that feed stocks will be available for future use, but probably at a higher price.

Because of the rising consumption of plastics products in automotive, residential, and construction uses, even modest upturns in these key segments would provide significant impetus for continuing growth in this major industry. Average growth between 1976 and 1977 was 16 percent.

Average Annual Employment for Rubber and Miscellaneous Plastics Products*

1975	20,000
1976	22,500
1977	26,200

*Source: Current Employment Statistics Program.

Table 37
SIC 30
Rubber and Miscellaneous Plastics Products
Dallas-Fort Worth SMSA

This major group includes establishments manufacturing from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak, rubber products such as tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries. This group also includes establishments primarily manufacturing tires, but establishments primarily recapping and retreading automobile tires are excluded. This major group also includes establishments engaged in molding primary plastics for the trade, and manufacturing miscellaneous finished plastics products.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	8,590	100.00	na	na
MANAGERS AND OFFICERS.............	660	7.66	4.57	95
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	250	3.05	na	na
Accountants and Auditors........	60	.71	8.42	36
Drafters.......................	40	.47	13.80	19
Purchasing Agents and/or Buyers.	30	.37	7.28	21
All Other Professional Workers..	90	1.10	na	na
All Other Technical Workers.....	30	.39	na	na
SERVICE OCCUPATIONS, TOTAL........	100	1.17	na	na
Janitors, Porters, and Cleaners.	100	1.17	14.34	32
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	6,590	76.61	na	na
Supervisors, Nonworking.........	280	3.22	7.88	53
Assemblers, Class A.............	80	.95	31.29	6
Assemblers, Class B.............	60	.64	35.76	5
Assemblers, Class C.............	450	5.26	15.77	22
Blow-Molding Machine Operators..	60	.68	28.32	5
Compression and/or Injection Molding Machine Operators, Plastic......................	1,000	11.65	14.70	33
Cutters, Machine................	40	.43	46.95	4

Table 37 (Continued) Rubber and Miscellaneous Plastics Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Embossing, Stamping, and/or Marking Machine Operators.....	40	.47	44.62	4
Extruder Operator Helpers, Plastics or Rubber...........	150	1.78	30.61	11
Extruder Operators, Plastics or Rubber.......................	210	2.39	24.62	19
Fabricators, Plastics..........	100	1.15	46.85	6
Finishers, Hand................	200	2.35	20.75	24
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials......................	110	1.24	18.73	26
Industrial Truck Operators......	100	1.21	22.29	20
Inspectors.....................	180	2.06	12.99	34
Laminators, Preforms...........	120	1.34	32.78	8
Machinists.....................	190	2.19	18.62	29
Maintenance Repairers, General Utility......................	130	1.51	15.58	34
Mechanics, Maintenance..........	100	1.15	15.23	22
Mixers and/or Blenders, Chemicals and Chemical Products.....................	160	1.81	18.05	26
Order Fillers..................	70	.75	21.87	18
Painters, Production...........	70	.85	38.64	9
Press Operators, Plastics.......	120	1.43	39.31	6
Press Tenders, Rubber Goods.....	90	1.03	25.99	7
Production Packagers, Hand or Machine......................	410	4.80	19.54	18
Punch-Press Operators, Plastics.	100	1.14	34.36	7
Rubber Goods Cutter-Finishers...	30	.35	31.69	7
Rubber Mill Operators..........	40	.42	15.09	8
Setters, Plastic Molding Machine......................	120	1.44	24.41	22
Tool and Die Makers............	110	1.30	14.47	22
Truck Drivers..................	110	1.31	13.33	35
Vacuum Plastic Forming Machine Operators....................	100	1.20	28.26	7
Welders and Flamecutters........	40	.50	24.58	7
All Other Skilled Craftsmen and Kindred Workers..............	150	1.76	na	na
All Other Operatives and Semi-skilled Workers..............	1,030	11.96	na	na
All Other Laborers and Unskilled Workers.....................	240	2.77	na	na

Table 37 (Continued) Rubber and Miscellaneous Plastics Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	790	9.19	na	na
Accounting Clerks...............	40	.49	11.51	18
General Clerks, Office..........	110	1.27	11.72	42
Secretaries.....................	160	1.84	7.82	62
Shipping and/or Receiving Clerks	90	1.00	11.28	38
Shipping Packers................	140	1.64	9.98	42
All Other Office Clerical Workers......................	190	2.19	na	na
All Other Plant Clerical Workers......................	60	.75	na	na
SALES OCCUPATIONS, TOTAL..........	200	2.30	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	180	2.11	8.49	46
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	95
Secretaries..	62
Supervisors, Nonworking............................	53
Sales Representatives, Sales Agents, and/or Sales Associates..................................	46
General Clerks, Office.............................	42
Shipping Packers...................................	42

Table 38
SIC 307
Miscellaneous Plastics Products
Statewide

This group includes establishments primarily engaged in molding primary plastics for the trade, and fabricating miscellaneous finished plastics products.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	19,940	100.00	na	na
MANAGERS AND OFFICERS.............	1,460	7.34	3.45	95
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	810	4.02	na	na
Accountants and Auditors........	150	.75	7.09	31
Drafters.......................	70	.33	9.88	12
Mechanical Engineers...........	70	.37	8.16	11
Personnel and Labor Relations Specialists...................	30	.15	10.36	10
Purchasing Agents and/or Buyers.	60	.30	6.27	16
Science Technicians............	230	1.15	17.23	4
All Other Engineering Technicians..................	50	.24	na	na
All Other Engineers............	80	.38	na	na
All Other Professional and Technical Workers............	70	.33	na	na
SERVICE OCCUPATIONS, TOTAL........	240	1.20	na	na
Janitors, Porters, and Cleaners.	230	1.14	9.47	29
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	15,350	76.97	na	na
Supervisors, Nonworking.........	810	4.05	5.50	49
Assemblers, Class A............	90	.45	28.83	4
Assemblers, Class B............	80	.38	28.52	4
Assemblers, Class C............	780	3.93	13.06	17
Blow-Molding Machine Operators..	80	.41	21.87	6
Casters, Plastics..............	150	.73	12.19	5

Table 38 (Continued) Miscellaneous Plastics Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Chemical Operator Helpers.......	30	.16	41.54	2
Chemical Operators-A...........	70	.33	37.79	3
Compression and/or Injection-Molding Machine Operators, Plastic......................	1,800	9.05	11.69	34
Conveyor Operators or Tenders...	70	.36	45.36	2
Cutters, Machine...............	50	.24	36.24	3
Electricians...................	70	.33	12.56	10
Embossing, Stamping, and/or Marking Machine Operators.....	50	.25	40.14	3
Extruder Operator Helpers, Plastics or Rubber...........	470	2.36	16.05	13
Extruder Operators, Plastics or Rubber......................	790	3.97	13.71	24
Fabricators, Plastics..........	510	2.58	14.46	8
Finishers, Hand................	760	3.81	8.40	23
Finishers, Machine.............	40	.18	28.45	5
Grinder Operators-Chemicals, Plastics, Rubber, and Related Materials...................	200	1.01	13.04	21
Heat Sealers...................	80	.41	35.49	2
Helpers, Trades................	70	.33	48.74	3
Industrial Truck Operators......	330	1.63	11.70	18
Inspectors.....................	370	1.87	11.51	28
Laminators, Preforms...........	360	1.79	20.12	8
Machinists.....................	530	2.68	15.47	26
Maintenance Repairers, General Utility......................	350	1.74	10.32	34
Mechanics, Maintenance.........	400	2.00	6.37	22
Mixers and/or Blenders, Chemicals and Chemical Products.....................	390	1.95	14.66	28
Order Fillers..................	160	.79	14.06	11
Painters, Production...........	120	.59	28.26	7
Plastics Repairers.............	60	.28	37.18	2
Press Operators and/or Plate Printers.....................	40	.20	22.63	5
Press Operators, Plastics.......	120	.60	40.29	2
Press Tenders, Rubber Goods.....	80	.41	32.91	3
Production Packagers, Hand or Machine......................	1,100	5.50	15.17	18
Punch-Press Operators, Plastics.	170	.84	32.28	4

Table 38 (Continued) Miscellaneous Plastics Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Sawyers, Plastics	30	.16	48.20	2
Setters, Plastic Molding Machine	260	1.31	17.10	19
Sewing Machine Operators, Regular Equipment-Nongarment	90	.46	45.93	3
Slitting Machine Operators	40	.20	22.25	3
Testers	40	.19	23.37	5
Tool and Die Makers	190	.97	11.86	18
Trimmers, Plastics	40	.19	31.51	4
Truck Drivers	250	1.23	11.46	27
Vacuum Plastic Forming Machine Operators	120	.59	26.05	4
Welders and Flamecutters	60	.29	25.71	4
All Other Mechanics and Repairers	30	.16	na	na
All Other Skilled Craftsmen and Kindred Workers	260	1.29	na	na
All Other Operatives and Semi-skilled Workers	1,470	7.39	na	na
All Other Laborers and Unskilled Workers	840	4.20	na	na
CLERICAL OCCUPATIONS, TOTAL	1,620	8.13	na	na
Accounting Clerks	90	.45	9.05	15
Bookkeepers, Hand	30	.15	15.36	9
General Clerks, Office	240	1.20	8.90	40
Payroll and/or Timekeeping Clerks	50	.26	7.57	15
Production Clerks and/or Coordinators	60	.29	13.47	11
Secretaries	300	1.49	5.77	54
Shipping and/or Receiving Clerks	200	1.00	9.78	33
Shipping Packers	220	1.09	9.14	28
Stock Clerks-Stockroom, Warehouse, or Storage Yard	70	.36	12.00	13
Switchboard Operator-Receptionists	40	.22	9.03	12
Typists	40	.19	14.91	8
All Other Office Clerical Workers	250	1.25	na	na
All Other Plant Clerical Workers	30	.16	na	na

Table 38 (Continued) Miscellaneous Plastics Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	460	2.33	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	440	2.21	9.92	40
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	95
Secretaries..	54
Supervisors, Nonworking..............................	49
General Clerks, Office...............................	40
Sales Representatives, Sales Agents, and/or Sales Associates..	40

SIC 31
LEATHER AND LEATHER PRODUCTS

The Leather Industry in Texas cannot be considered large compared to other manufacturing segments, but the availability of raw materials and a continuing demand for the main product, interstate as well as intrastate, lends a special emphasis to the industry.

In May of 1977, the Leather Industry employed approximately 8,100 employees in 133 plants throughout Texas. Forty-six percent are concentrated in the men's and women's footwear divisions, with the men's division accounting for the bulk with 40 percent.

The Leather Products Industry has grown, on an annual average basis, approximately 18 percent since 1975, with the largest increase occurring between 1975 and 1976 with a 13 percent boost. This significant increase can mainly be attributed to the popularity of leather western goods that were making an initial influx during that period.

Like many manufacturing industries, the majority of occupations are in the Production and Maintenance category. Sewing and Stitching Machine Operators are the most dominant within this group.

The industry is expected to keep pace with moderate, but stable demand through the mid-1980's.

Average Annual Employment for Leather and Leather Products*

1975	6,700
1976	7,600
1977	7,900

*Source: Current Employment Statistics Program.

Table 39
SIC 31
Leather and Leather Products
Statewide

This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Leather converters are also included.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	8,100	100.00	na	na
MANAGERS AND OFFICERS............	430	5.30	5.12	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	100	1.21	na	na
Accountants and Auditors........	30	.39	4.43	17
All Other Professional and Technical Workers............	70	.81	na	na
SERVICE OCCUPATIONS, TOTAL........	90	1.08	na	na
Janitors, Porters, and Cleaners.	70	.81	6.14	29
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	6,170	76.30	na	na
Supervisors, Nonworking.........	180	2.26	4.54	36
Assemblers, Class A.............	90	1.11	21.55	10
Assemblers, Class B.............	270	3.33	15.61	19
Assemblers, Class C.............	300	3.70	14.15	16
Assemblers for Puller-Over, Hand or Machine..............	30	.38	0.00	7
Belt Makers, Apparel............	70	.84	41.28	16
Bottom Fillers..................	60	.77	22.76	10
Buffers, Shoe Parts.............	30	.36	25.87	10
Cementers, Pasters, Backers, or Fitters, Hand.............	140	1.67	3.79	16
Cobblers........................	30	.41	0.00	7
Cutters, Hand...................	80	.99	17.86	24

Table 39 (Continued) Leather and Leather Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Die Cutters and/or Clicking Machine Operators	290	3.60	3.56	38
Embossing, Stamping, and/or Marking Machine Operators	90	1.06	24.65	28
Eyelet Machine Operators	40	.51	11.67	19
Fasteners, Machine	30	.36	0.00	9
Floor Boys/Girls	80	.93	0.00	12
Gluers and/or Cementers, Hand	50	.66	3.53	9
Harness Makers	50	.56	33.31	9
Heel Attachers	50	.60	8.61	14
Inkers, Hand or Machine	30	.40	8.68	12
Inspectors	160	1.97	7.56	21
Lasters, Hand	80	1.02	7.40	17
Leather Stampers, Hand	70	.82	25.71	19
Maintenance Repairers, General Utility	80	.92	1.24	17
Mechanics, Maintenance	40	.51	13.56	16
Order Fillers	90	1.11	0.00	9
Production Packagers, Hand or Machine	90	1.08	2.69	14
Repairers, Finish	70	.82	9.97	10
Riveters, Light	30	.41	12.09	14
Saddle Makers	100	1.27	21.44	22
Sewing Machine Operators, Regular Equipment-Nongarment	720	8.87	11.87	36
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment	340	4.20	5.10	10
Shank-Piece Tackers	30	.40	20.24	9
Shoe Parts Sewers, Hand	110	1.34	26.29	7
Skivers	80	1.02	5.42	22
Sorters, Leather	70	.90	5.54	22
Sprayers, Hand and/or Machine	30	.36	4.48	12
Stainers	40	.45	8.40	12
Stitchers, Special Machine	100	1.16	5.03	12
Stitchers, Standard Machine	420	5.15	8.77	19
Stitchers, Utility	110	1.35	16.12	14
Toe Lasters	50	.66	17.03	10
Treers	40	.44	32.20	12
Trimmers, Machine	70	.82	14.70	14
Vamp Creasers	30	.40	10.15	9
All Other Skilled Craftsmen and Kindred Workers	70	.91	na	na

Table 39 (Continued) Leather and Leather Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
All Other Operatives and Semi-skilled Workers................	780	9.60	na	na
All Other Laborers and Unskilled Workers......................	280	3.48	na	na
CLERICAL OCCUPATIONS, TOTAL........	810	9.94	na	na
Accounting Clerks................	40	.52	11.12	21
File Clerks......................	40	.51	1.28	14
General Clerks, Office...........	60	.78	17.01	29
Keypunch Operators...............	30	.38	0.00	9
Order Clerks.....................	30	.36	4.26	12
Payroll and/or Timekeeping Clerks	50	.56	7.15	29
Production Clerks and/or Coordinators..................	40	.43	3.84	14
Secretaries......................	70	.82	9.32	33
Shipping and/or Receiving Clerks.	60	.77	15.49	26
Shipping Packers.................	130	1.61	15.64	34
Stock Clerks-Stockroom, Warehouse, or Storage Yard..........	40	.52	7.69	26
Typists..........................	40	.44	3.22	16
All Other Clerical Workers.......	180	2.17	na	na
SALES OCCUPATIONS, TOTAL...........	500	6.15	na	na
Sales Clerks.....................	280	3.49	23.98	38
Sales Representatives, Sales Agents, and/or Sales Associates....................	220	2.64	15.27	22

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	83
Die Cutters and/or Clicking Machine Operators.......	38
Sales Clerks.......................................	38
Sewing Machine Operators, Regular Equipment-Nongarment...	36
Supervisors, Nonworking............................	36

Table 40
SIC 31
Leather and Leather Products
Dallas-Fort Worth SMSA

This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Leather converters are also included.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,740	100.00	na	na
MANAGERS AND OFFICERS.............	200	7.26	5.86	85
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	40	1.35	na	na
SERVICE OCCUPATIONS..............	30	1.06	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,990	72.92	na	na
Supervisors, Nonworking.........	60	2.29	5.58	38
Assemblers, Class B............	80	2.95	2.96	23
Assemblers, Class C............	260	9.63	7.83	31
Die Cutters and/or Clicking Machine Operators............	100	3.57	3.98	46
Eyelet Machine Operators........	30	.98	16.03	23
Inspectors......................	40	1.53	14.69	23
Order Fillers..................	80	2.95	0.00	23
Saddle Makers..................	50	1.89	31.20	23
Sewing Machine Operators, Regular Equipment-Nongarment..	200	7.18	7.49	38
All Other Skilled Craftsmen and Kindred Workers..............	110	3.88	na	na
All Other Operatives and Semi-skilled Workers..............	950	34.72	na	na
All Other Laborers and Unskilled Workers.....................	30	1.21	na	na

Table 40 (Continued) Leather and Leather Products, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	320	11.49	na	na
Secretaries.....................	30	1.05	4.36	46
Shipping and/or Receiving Clerks	40	1.31	10.77	31
Shipping Packers................	50	1.93	37.81	38
All Other Office Clerical Workers......................	170	6.11	na	na
All Other Plant Clerical Workers	30	1.06	na	na
SALES OCCUPATIONS, TOTAL..........	160	5.89	na	na
Sales Clerks....................	60	2.11	32.98	23
Sales Representatives, Sales Agents, and/or Sales Associates...................	100	3.75	4.89	31

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	85
Die Cutters and/or Clicking Machine Operators........	46
Secretaries..	46

Table 41
SIC 31
Leather and Leather Products
El Paso SMSA

This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Leather converters are also included.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	1,620	100.00	na	na
MANAGERS AND OFFICERS.............	30	1.98	0.00	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS.......................	2/			
SERVICE OCCUPATIONS..............	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,310	81.57	na	na
Supervisors, Nonworking.........	40	2.47	0.00	50
Assemblers, Class B.............	140	8.91	0.00	50
Bottom Fillers..................	40	2.72	0.00	25
Cementers, Pasters, Backers, or Fitters, Hand................	40	2.41	0.00	50
Cutters, Hand...................	30	1.98	0.00	50
Die Cutters and/or Clicking Machine Operators.............	60	3.71	0.00	50
Gluers and/or Cementers, Hand...	30	1.91	0.00	25
Inspectors......................	50	2.90	0.00	25
Lasters, Hand...................	30	1.91	0.00	25
Maintenance Repairers, General Utility......................	40	2.47	0.00	25
Repairers, Finish...............	50	2.97	0.00	50
Sorters, Leather................	30	2.04	0.00	75
Stitchers, Standard Machine.....	180	11.38	0.00	50
Toe Lasters.....................	40	2.41	0.00	50
Trimmers, Machine...............	30	1.98	0.00	50
All Other Skilled Craftsmen and Kindred Workers...............	50	2.90	na	na

Table 41 (Continued) Leather and Leather Products, El Paso SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
All Other Operatives and Semiskilled Workers...............	320	19.67	na	na
All Other Laborers and Unskilled Workers......................	110	6.97	na	na
CLERICAL OCCUPATIONS, TOTAL.......	190	11.90	na	na
Shipping Packers................	30	2.10	0.00	75
All Other Clerical Workers......	160	9.80	na	na
SALES OCCUPATIONS.................	30	1.91	na	na

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers...............................	100
Shipping Packers....................................	75
Sorters, Leather....................................	75

Table 42
SIC 314
Footwear, Except Rubber
Statewide

This group includes establishments primarily engaged in manufacturing footwear, except rubber. These establishments manufacture house slippers; men's and women's footwear, designed primarily for dress, street, and work; and footwear, except rubber, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	4,350	100.00	na	na
MANAGERS AND OFFICERS	80	1.87	11.07	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS	50	1.10	na	na
SERVICE OCCUPATIONS, TOTAL	60	1.26	na	na
Janitors, Porters, and Cleaners	40	.98	7.79	67
All Other Service Workers	[2]			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,540	81.47	na	na
Supervisors, Nonworking	110	2.61	4.53	75
Assemblers, Class B	200	4.46	0.00	42
Assemblers for Puller-Over, Hand or Machine	30	.70	0.00	33
Bottom Fillers	60	1.44	22.76	50
Buffers, Shoe Parts	30	.68	25.87	50
Cementers, Pasters, Backers, or Fitters-Hand	130	3.02	3.91	67
Cobblers	30	.77	0.00	33
Cutters, Hand	40	.93	16.29	50
Die Cutters and/or Clicking Machine Operators	120	2.81	6.92	67
Floor Boys/Girls	70	1.51	0.00	50
Heel Attachers	50	1.12	8.61	67
Inspectors	90	2.08	0.00	42
Lasters, Hand	80	1.85	7.42	75

Table 42 (Continued) Footwear, Except Rubber, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Maintenance Repairers, General Utility	70	1.58	0.00	50
Production Packagers, Hand or Machine	60	1.37	0.00	50
Repairers, Finish	70	1.53	9.97	50
Sewing Machine Operators, Regular Equipment-Nongarment	230	5.28	18.60	25
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment	90	2.01	0.00	25
Shank-Piece Tackers	30	.75	20.24	42
Shoe Parts Sewers, Hand	110	2.49	26.29	33
Skivers	40	.87	11.10	67
Sorters, Leather	40	.93	6.98	58
Stitchers, Special Machine	100	2.17	5.03	58
Stitchers, Standard Machine	390	8.99	5.67	67
Stitchers, Utility	80	1.92	9.42	58
Toe Lasters	50	1.23	17.03	50
Treers	40	.82	32.20	58
Trimmers, Machine	60	1.35	16.20	50
Vamp Creasers	30	.75	10.15	42
All Other Skilled Craftsmen and Kindred Workers	100	2.37	na	na
All Other Operatives and Semi-skilled Workers	650	14.91	na	na
All Other Laborers and Unskilled Workers	260	5.86	na	na
CLERICAL OCCUPATIONS, TOTAL	460	10.47	na	na
Keypunch Operators	30	.70	0.00	42
Production Clerks and/or Coordinators	30	.68	0.00	33
Shipping and/or Receiving Clerks	40	.82	21.99	58
Shipping Packers	50	1.16	5.61	58
Stock Clerks-Stockroom, Warehouse, or Storage Yard	30	.70	9.24	67
All Other Office Clerical Workers	280	6.36	na	na

Table 42 (Continued) Footwear, Except Rubber, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	160	3.81	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	80	1.87	4.11	42
All Other Sales Workers.........	80	1.92	na	na

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	83
Lasters, Hand......................................	75
Supervisors, Nonworking............................	75

SIC 32
Stone, Clay, Glass, and Concrete Products

Stone, Clay, Glass, and Concrete Products are made in Texas largely for the construction industry. Major outputs include cement and concrete products, brick, tile, plaster, building stone, and flat glass. A few container plants are also in operation producing bottles, jars, and drinking glasses. Altogether there are more than 700 Stone, Clay, and Glass plants mostly located close to sources of the earth materials that they process.

Concrete, Gypsum, and Plaster Products is the only publishable industry in this major group. It is also the largest group, representing 41 percent of the total employment of 38,100 (May 1977). Ready-Mixed Concrete is the largest single division. This one division alone employees 7,600 workers. Truck Drivers are the dominant occupation in the Production and Maintenance category with the bulk of these working in the Ready-Mixed Concrete division.

Growth in the Stone, Clay, and Glass Products Industry is closely correlated to the fluctuations in the construction sector. The 7 percent growth from 1976 to 1977 is expected to continue as long as there are no major downturns in construction activity.

Average Annual Employment for Stone, Clay, Glass, and Concrete Products*

1975	34,200
1976	35,900
1977	38,300

*Source: Current Employment Statistics Program.

Table 43
SIC 327
Concrete, Gypsum, and Plaster Products
Statewide

This group includes establishments primarily engaged in manufacturing concrete products from a combination of cement and aggregate; ready-mixed concrete; lime; and gypsum products.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	15,650	100.00	na	na
MANAGERS AND OFFICERS.............	1,280	8.17	9.14	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	290	1.87	na	na
Accountants and Auditors........	80	.51	16.77	21
Drafters.......................	100	.61	20.81	10
All Other Professional Workers..	80	.52	na	na
All Other Technical Workers.....	30	.22	na	na
SERVICE OCCUPATIONS, TOTAL........	150	.92	na	na
Janitors, Porters, and Cleaners.	100	.62	22.53	25
All Other Service Workers.......	50	.30	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	12,240	78.27	na	na
Supervisors, Nonworking.........	330	2.11	16.08	40
Batch Plant Operators...........	720	4.58	11.15	69
Concrete Pipe Makers............	310	1.99	45.10	14
Concrete Rubbers................	190	1.21	32.32	12
Concrete Stone Fabricators......	880	5.65	35.43	16
Concrete Stone Finishers........	30	.19	37.70	2
Crane, Derrick, and Hoist Operators.....................	240	1.54	19.75	24
Delivery and Route Workers......	240	1.50	32.97	15
Electricians....................	30	.20	48.25	4
Heavy Equipment Operators.......	240	1.50	19.54	29
Industrial Truck Operators......	430	2.75	20.33	38

Table 43 (Continued) Concrete, Gypsum, and Plaster Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Kiln Operators	70	.44	32.33	7
Maintenance Repairers, General Utility	370	2.34	37.16	30
Mechanics, Automotive	420	2.65	15.40	46
Mechanics, Maintenance	130	.83	20.25	20
Order Fillers	50	.32	46.39	10
Pipe Strippers	220	1.41	31.91	11
Testers	30	.21	30.21	3
Truck Drivers	4,130	26.40	13.61	84
Welders and Flamecutters	320	2.02	24.72	23
All Other Mechanics and Repairers	50	.33	na	na
All Other Skilled Craftsmen and Kindred Workers	450	2.87	na	na
All Other Operatives and Semi-skilled Workers	850	5.45	na	na
All Other Laborers and Unskilled Workers	1,510	9.64	na	na
CLERICAL OCCUPATIONS, TOTAL	1,280	8.14	na	na
Accounting Clerks	140	.87	20.01	27
Bookkeepers, Hand	160	.99	15.72	34
Dispatchers-Vehicle, Service, or Work	260	1.66	11.03	43
General Clerks, Office	310	1.98	23.88	39
Secretaries	190	1.18	13.90	34
All Other Office Clerical Workers	120	.77	na	na
All Other Plant Clerical Workers	100	.65	na	na
SALES OCCUPATIONS, TOTAL	410	2.62	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	390	2.49	12.20	52
All Other Sales Workers	2/			

1/ Based on unrounded data.

2/ Estimate below cut-off level so occupations will not add to category total.

Table 43 (Continued) Concrete, Gypsum, and Plaster Products, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Truck Drivers	84
Batch Plant Operators	69
Sales Representatives, Sales Agents, and/or Sales Associates	52
Mechanics, Automotive	46

SIC 33
PRIMARY METAL INDUSTRIES

Texas' Primary Metal Manufacturers employ approximately 41,000 workers (April 1977), chiefly in the production of steel, aluminum, magnesium, copper, lead, and zinc and in the making of pipe, wire, sheet metal, and foundry products. The industry has developed in Texas largely because of regional demand for metal goods and because fuels, used in large quantity in most metal plants, are available in Texas. Most of the ores are shipped into Texas from elsewhere, though some iron ore is mined in East Texas, and magnesium is extracted from seawater.

The Iron and Steel Foundries (the only published industry on a statewide basis) is represented by three major divisions--Gray Iron Foundries, Malleable Iron Foundries, and Steel Investment Foundries. These three divisions make up approximately 20 percent of the total Primary Metal Industries employment.

A very high percentage (86 percent) of the occupations in the Iron and Steel Foundries segment are in Production and Maintenance. Filers, Grinders, Buffers, etc., represent the largest category. Foundries are progressing from a labor-intensive to a capital-intensive industry. Mechanization and automation have become realities of the industry, and productivity and quality should continue to rise. The auto industry is a prime user of this industry and any change causes a definite impact at the industry level. Employment is expected to increase at a moderate pace, but probably not at the 1976-1977 rate.

Average Annual Employment for Primary Metal Industries*

1975	36,800
1976	38,000
1977	40,900

*Source: Current Employment Statistics Program.

Table 44
SIC 33
Primary Metal Industries
Houston SMSA

This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; in the manufacture of castings and other basic products of ferrous and nonferrous metals; and in the manufacture of nails, spikes, and insulated wire and cable. This major group also includes the production of coke. Establishments primarily engaged in manufacturing metal forgings or stampings are excluded.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	9,760	100.00	na	na
MANAGERS AND OFFICERS.............	350	3.60	10.90	88
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	340	3.47	na	na
Accountants and Auditors........	30	.31	13.70	21
Chemists........................	50	.50	4.33	15
Metallurgists and Metallurgical Engineers.....................	30	.34	8.30	18
All Other Engineers.............	100	.97	na	na
All Other Professional and Technical Workers.............	130	1.34	na	na
SERVICE OCCUPATIONS, TOTAL........	130	1.35	na	na
Guards and Doorkeepers..........	50	.50	10.43	9
Janitors, Porters, and Cleaners.	70	.74	14.41	29
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	8,220	84.24	na	na
Supervisors, Nonworking.........	640	6.55	3.15	44
Brakers, Train..................	140	1.45	6.96	6
Coremakers-Hand, Bench and/or Floor.........................	50	.51	14.22	18
Crane, Derrick, and Hoist Operators.....................	590	6.09	1.13	24

Table 44 (Continued) Primary Metal Industries, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Electricians	320	3.27	3.73	18
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	180	1.89	11.27	24
Furnace Operator Helpers or Heater Helpers	40	.42	33.99	21
Furnace Operators and/or Cupola Tenders	60	.65	14.74	35
Grinding and/or Abrading Machine Operators, Metal	50	.47	49.19	15
Heat Treaters, Annealers, and/or Temperers	110	1.15	33.66	24
Helpers, Trades	110	1.11	4.72	12
Industrial Truck Operators	130	1.30	12.15	32
Inspectors	230	2.38	6.49	18
Instrument Mechanics	30	.32	8.70	6
Machinists	110	1.17	15.55	15
Maintenance Repairers, General Utility	70	.73	39.31	29
Mechanics, Automotive	80	.85	7.50	18
Mechanics, Maintenance	410	4.19	5.78	21
Molders, Bench and/or Floor	60	.57	18.95	18
Molders, Machine	80	.85	14.08	21
Oilers	40	.40	2.56	15
Order Fillers	50	.47	37.94	15
Refractory Materials Repairers	70	.70	8.54	12
Riggers	100	1.07	5.00	12
Samplers and/or Test Preparers	40	.38	4.91	9
Shakeout Workers, Foundry	50	.50	32.89	21
Truck Drivers	160	1.65	16.22	47
Welders and Flamecutters-A	140	1.38	6.60	12
Welders and Flamecutters-B	60	.62	35.14	6
Welders and Flamecutters-C	210	2.17	20.30	12
Yard Engineers	70	.69	7.05	6
All Other Mechanics and Repairers	100	1.01	na	na
All Other Skilled Craftsmen and Kindred Workers	880	9.03	na	na
All Other Operatives and Semi-skilled Workers	2,080	21.28	na	na
All Other Laborers and Unskilled Workers	680	6.96	na	na

Table 44 (Continued) Primary Metal Industries, Houston SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	650	6.61	na	na
Production Clerks and/or Coordinators.................	60	.61	5.82	21
Secretaries....................	50	.55	19.83	32
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	50	.53	11.05	26
All Other Office Clerical Workers......................	260	2.62	na	na
All Other Plant Clerical Workers......................	230	2.31	na	na
SALES OCCUPATIONS, TOTAL..........	70	.73	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	70	.73	45.44	38

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	88
Truck Drivers......................................	47
Supervisors, Nonworking............................	44
Sales Representatives, Sales Agents, and/or Sales Associates.......................................	38
Furnace Operators and/or Cupola Tenders............	35

Table 45
SIC 33
Primary Metal Industries
El Paso SMSA

This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; in the manufacture of castings and other basic products of ferrous and nonferrous metals; and in the manufacture of nails, spikes, and insulated wire and cable. This major group also includes the production of coke. Establishments primarily engaged in manufacturing metal forgings or stampings are excluded.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	2,520	100.00	na	na
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	140	5.63	na	na
Chemists	40	1.74	1.90	100
All Other Professional and Technical Workers	100	3.88	na	na
SERVICE OCCUPATIONS, TOTAL	50	2.02	na	na
Guards and Doorkeepers	30	1.15	2.62	50
All Other Service Workers	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,190	85.85	na	na
Supervisors, Nonworking	210	8.32	.15	100
Boilermakers	60	2.54	.46	50
Casters, Ingots and Pigs	50	1.98	1.79	83
Coilers, Winders, and/or Spoolers	30	1.27	0.00	17
Conveyor Operators or Tenders	80	3.29	.93	67
Crane, Derrick, and Hoist Operators	90	3.57	0.00	83
Electricians	50	1.82	1.68	83
Furnace Chargers	70	2.66	5.74	50
Furnace Operators and/or Cupola Tenders	80	2.97	5.13	83

Table 45 (Continued) Primary Metal Industries, El Paso SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Helpers, Trades	70	2.89	1.15	100
Industrial Truck Operators	110	4.24	.78	100
Machinists	100	3.77	0.00	83
Maintenance Repairers, General Utility	30	1.27	0.00	50
Refractory Materials Repairers	50	1.98	0.00	67
Samplers and/or Test Preparers	70	2.58	.46	67
Truck Drivers	60	2.42	1.16	83
Welders and Flamecutters-A	70	2.62	0.00	67
All Other Skilled Craftsmen and Kindred Workers	260	10.11	na	na
All Other Operatives and Semiskilled Workers	380	15.02	na	na
All Other Laborers and Unskilled Workers	270	10.54	na	na
CLERICAL OCCUPATIONS, TOTAL	140	5.51	na	na
Accounting Clerks	40	1.39	2.21	67
All Other Clerical Workers	100	4.12	na	na

[1] Based on unrounded data.

[2] Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Chemists	100
Helpers, Trades	100
Industrial Truck Operators	100
Supervisors, Nonworking	100

Table 46
SIC 332
Iron and Steel Foundries
Statewide

This group includes establishments primarily engaged in manufacturing gray iron castings, including cast iron pressure and soil pipes and fittings; malleable iron castings; steel investment castings; and steel castings, not elsewhere classified. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	8,360	100.00	na	na
MANAGERS AND OFFICERS.............	270	3.23	7.65	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS........................	230	2.79	na	na
SERVICE OCCUPATIONS, TOTAL........	110	1.29	na	na
Guards and Doorkeepers..........	40	.43	27.60	21
Janitors, Porters, and Cleaners.	30	.40	36.70	29
All Other Service Workers.......	40	.44	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	7,230	86.36	na	na
Supervisors, Nonworking.........	420	5.05	6.61	75
Carpenters......................	70	.77	14.15	29
Core Assemblers, Pasters, and/or Finishers....................	90	1.05	7.35	33
Coremakers-Hand, Bench, and/or Floor.......................	160	1.89	17.70	58
Coremakers, Machine.............	110	1.33	12.97	38
Crane, Derrick, and Hoist Operators....................	80	.98	9.26	21
Drill-Press and/or Boring Machine Operators............	130	1.58	17.56	13
Electricians....................	100	1.23	9.49	42
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers....................	430	5.20	28.54	54

Table 46 (Continued) Iron and Steel Foundries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Furnace Chargers...............	40	.52	13.43	21
Furnace Operator Helpers or Heater Helpers...............	50	.53	27.59	42
Furnace Operators and/or Cupola Tenders......................	110	1.34	17.18	88
Grinding Machine Operators, Metal........................	60	.69	38.16	21
Helpers, Trades.................	100	1.18	12.80	17
Industrial Truck Operators......	270	3.26	6.19	46
Inspectors......................	90	1.05	8.44	46
Lathe and/or Turning Machine Operators....................	90	1.03	26.80	17
Machinists......................	160	1.85	22.80	25
Maintenance Repairers, General Utility.....................	60	.70	32.24	42
Mechanics, Automotive...........	110	1.25	17.10	17
Mechanics, Maintenance..........	380	4.49	12.91	38
Millwrights.....................	70	.80	13.40	17
Mold Closers, Core Setters, and/or Weight and Jacket Setters......................	260	3.08	12.91	46
Molders, Bench and/or Floor.....	150	1.80	24.72	63
Molders, Machine................	280	3.33	18.52	67
Order Fillers...................	310	3.67	16.88	21
Patternmakers, Wood.............	60	.65	12.54	46
Pourers, Metal..................	150	1.78	11.15	63
Sand Cutters, Mixers, and/or Slingers....................	40	.46	45.08	33
Sandblasters and/or Shotblasters	70	.81	26.93	50
Setters, Molding and Coremaking Machine.....................	70	.80	34.42	29
Shakeout Workers, Foundry.......	260	3.09	8.23	75
Shell-Mold and/or Shell-Core Machine Operators.............	140	1.66	6.97	38
Truck Drivers...................	350	4.23	15.78	54
Welders and Flamecutters-B......	80	.92	18.78	17
Welders and Flamecutters-C......	140	1.66	13.40	25
All Other Skilled Craftsmen and Kindred Workers..............	230	2.72	na	na
All Other Operatives and Semi-skilled Workers..............	930	11.18	na	na
All Other Laborers and Unskilled Workers......................	530	6.38	na	na

Table 46 (Continued) Iron and Steel Foundries, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	450	5.43	na	na
General Clerks, Office..........	40	.50	17.27	38
Secretaries.....................	40	.49	4.53	33
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	70	.81	11.56	46
All Other Office Clerical Workers......................	250	2.99	na	na
All Other Plant Clerical Workers	50	.63	na	na
SALES OCCUPATIONS, TOTAL..........	70	.88	na	na
Sales Representatives, Sales Agents, and/or Sales Associates..................	70	.88	11.48	63

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE.

OCCUPATION	PERCENT
Furnace Operators and/or Cupola Tenders.............	88
Managers and Officers..............................	83
Shakeout Workers, Foundry..........................	75
Supervisors, Nonworking............................	75
Molders, Machine...................................	67

SIC 34
FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT

The growth of this industry is closely related to the increasing demand for metal building goods: girders, reinforcing bars, air-conditioning ductwork, metal windows and doors, and a wide variety of components for building and highway work.

Approximately 79,000 workers are employed at the total industry level. A large percentage are employed in large factories, but most are small specialized establishments that serve local markets. Houston is the dominant center of the Fabricated Metal Industry.

On a statewide basis, the Miscellaneous Fabricated Metal Products Group was the only segment that met the criteria or (criterion) for publication. While this group is not the largest portion of the total industry, it does represent 21 percent as of June 1977. The bulk of the employment in the Miscellaneous Group is in the Production and Maintenance Category (67 percent) with Lathe and Turning Machine Operators representing the largest group with 7 percent.

Fabricated Metals as a whole and the Miscellaneous segment as a portion have not experienced rapid growth over the last few years. Supply and demand factors are prevalent for normal growth, but automation is a deterring factor for accelerated occupational growth through the next decade.

Average Annual Employment for Fabricated Metal Products, Except Machinery and Transportation Equipment*

1975	77,500
1976	78,300
1977	78,400

*Source: Current Employment Statistics Program.

Table 47
SIC 34
Fabricated Metal Products, Except Machinery and Transportation Equipment
El Paso SMSA

This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	1,020	100.00	na	na
MANAGERS AND OFFICERS.............	60	5.89	21.78	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	40	3.74	na	na
SERVICE OCCUPATIONS..............	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	810	80.92	na	na
Supervisors, Nonworking.........	40	4.12	15.70	64
Assemblers, Class C............	30	3.04	37.47	21
Helpers, Trades................	60	6.28	46.62	36
Punch-Press Operators, Metal....	30	3.33	49.31	29
Welders and Flamecutters-B......	50	4.91	48.45	36
All Other Skilled Craftsmen and Kindred Workers..............	300	29.79	na	na
All Other Operatives and Semi-skilled Workers..............	180	17.70	na	na
All Other Laborers and Unskilled Workers......................	120	11.70	na	na
CLERICAL OCCUPATIONS..............	60	6.29	na	na
SALES OCCUPATIONS, TOTAL..........	30	2.45	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	30	2.45	47.87	36

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 47 (Continued) Fabricated Metal Products, Except Machinery and Transportation Equipment, El Paso SMSA

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Supervisors, Nonworking	64

Table 48
SIC 349
Miscellaneous Fabricated Metal Products
Statewide

This group includes establishments primarily engaged in manufacturing steel and wire springs; valves and pipe fittings, except plumbers' brass goods; miscellaneous fabricated wire products; metal foil and leaf; fabricated pipe and pipe fittings; and fabricated metal products, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	16,680	100.00	na	na
MANAGERS AND OFFICERS.............	1,250	7.53	6.51	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	1,410	8.42	na	na
Accountants and Auditors........	120	.71	9.15	43
Cost Estimators.................	50	.27	21.80	14
Drafters........................	440	2.66	31.69	32
Industrial Engineers............	60	.33	19.31	12
Mechanical Engineers............	230	1.40	19.49	24
Purchasing Agents and/or Buyers.	100	.59	6.55	28
All Other Engineering Technicians..................	110	.64	na	na
All Other Engineers.............	40	.23	na	na
All Other Professional Workers..	220	1.34	na	na
All Other Technical Workers.....	40	.24	na	na
SERVICE OCCUPATIONS, TOTAL........	190	1.14	na	na
Janitors, Porters, and Cleaners.	160	.98	11.48	48
All Other Service Workers.......	30	.15	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	11,210	67.30	na	na
Supervisors, Nonworking.........	540	3.25	4.69	60
Assemblers, Class A.............	220	1.29	28.19	18
Assemblers, Class B.............	540	3.24	14.87	24
Assemblers, Class C.............	640	3.82	24.12	27
Carpenters......................	40	.25	42.41	5

Table 48 (Continued) Miscellaneous Fabricated Metal Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Drill-Press and/or Boring Machine Operators............	440	2.62	15.52	35
Electricians....................	40	.25	16.40	9
Electroplaters..................	40	.21	34.52	7
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers.....................	100	.61	18.37	14
Fitters, Structural Metal.......	180	1.09	39.37	6
Forging-Press Operators.........	40	.22	39.57	3
Grinding and/or Abrading Machine Operators, Metal..............	230	1.36	16.89	27
Helpers, Trades.................	260	1.54	27.21	24
Industrial Truck Operators......	150	.92	19.43	19
Inspectors......................	360	2.16	12.32	40
Lathe and/or Turning Machine Operators.....................	1,180	7.10	11.61	37
Machine Tool Operators, Combination..................	360	2.17	23.30	23
Machine Tool Operators, Numerical Control............	60	.36	14.30	7
Machine Tool Operators, Toolroom.....................	90	.54	26.68	16
Machine Tool Setters, Metal Working......................	70	.40	25.68	13
Machinists......................	790	4.77	49.33	23
Maintenance Repairers, General Utility......................	110	.66	19.40	21
Mechanics, Maintenance..........	160	.97	16.91	19
Milling and/or Planing Machine Operators....................	110	.65	19.71	13
Order Fillers...................	60	.35	23.60	8
Painters, Production............	70	.40	23.71	20
Power Brake and/or Bending Machine Operators, Metal......	290	1.75	10.20	13
Production Packagers, Hand or Machine......................	210	1.28	18.09	28
Punch-Press Operators, Metal....	60	.36	21.04	12
Sawyers, Metal..................	40	.21	37.93	7
Testers.........................	60	.35	25.29	9
Tool and Die Makers.............	90	.53	23.96	19
Truck Drivers...................	110	.65	20.42	34
Welders and Flamecutters-B......	320	1.92	43.80	19

Table 48 (Continued) Miscellaneous Fabricated Metal Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Welders and Flamecutters-C......	180	1.07	39.81	11
All Other Mechanics and Repairers....................	50	.32	na	na
All Other Skilled Craftsmen and Kindred Workers..............	1,260	7.58	na	na
All Other Operatives and Semi-skilled Workers..............	1,050	6.31	na	na
All Other Laborers and Unskilled Workers.....................	610	3.68	na	na
CLERICAL OCCUPATIONS, TOTAL.......	2,140	12.76	na	na
Clerical Supervisors, Office or Plant........................	70	.40	6.25	13
Accounting Clerks..............	200	1.17	19.18	34
Bookkeepers, Hand..............	60	.37	20.87	26
File Clerks....................	50	.29	15.23	17
General Clerks, Office..........	250	1.51	27.73	42
Keypunch Operators.............	60	.37	5.25	10
Order Clerks...................	90	.51	25.17	14
Payroll and/or Timekeeping Clerks.......................	50	.30	14.34	19
Production Clerks and/or Coordinators.................	130	.75	5.89	18
Secretaries....................	240	1.42	8.65	55
Shipping and/or Receiving Clerks	100	.61	11.34	30
Shipping Packers...............	170	1.00	8.38	19
Stenographers..................	40	.25	20.35	5
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	120	.69	7.47	19
Switchboard Operator-Receptionists................	40	.26	8.54	23
Typists........................	90	.51	25.76	17
All Other Office Machine Operators.....................	50	.31	na	na
All Other Clerical Workers......	330	1.97	na	na

Table 48 (Continued) Miscellaneous Fabricated Metal Products, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	480	2.86	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	450	2.72	19.21	54
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	93
Supervisors, Nonworking............................	60
Secretaries..	55
Sales Representatives, Sales Agents, and/or Sales Associates..	54
Janitors, Porters, and Cleaners....................	48

SIC 35
MACHINERY, EXCEPT ELECTRICAL

Today, more Texas plants turn out machinery than any other class of manufacturing goods. The number of workers in this total industry was approximately 115,000 as of June 1977, more persons than were employed in any other type of manufacturing. The Nonelectrical Machinery Industry is concentrated in the Houston Standard Metropolitan Statistical Area (SMSA) where more than a third of all Texas workers in that category are employed. Oil field equipment and construction machinery are among the major outputs of the nonelectrical manufacturers.

The publishable industries in this major Machinery Group are--Farm and Garden Machinery and Equipment; Metalworking Machinery and Equipment; Special Industry Machinery, Except Metalworking Machinery; and Office, Computing, and Accounting Machines. These industries do not make up a majority of the total Machinery Industry employment, but they do represent a significant 22 percent. The manufacturing of Metalworking Machinery and the manufacturing of Farm Machinery are the two major publishable segments where blue-collar Production and Maintenance employees represent the majority group. The greatest percentages of single occupations in this group are in Welders and Flamecutters, Tool and Die Makers, Lathe Operators, and Combination Machine Tool Operators.

Employment in the total Machinery Industry has grown 13 percent in the past three years. This trend is expected to continue through the mid-1980's.

Average Annual Employment for Machinery, Except Electrical*

1975	102,300
1976	108,800
1977	115,600

*Source: Current Employment Statistics Program.

Table 49
SIC 35
Machinery, Except Electrical
Austin SMSA

This major group includes establishments engaged in manufacturing machinery and equipment, other than electrical equipment and transportation equipment. Machines powered by built-in or detachable motors ordinarily are included in this major group, with the exception of electrical household appliances. Portable tools, both electric and pneumatic powered, are included in this major group, but hand tools are excluded.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	5,520	100.00	na	na
MANAGERS AND OFFICERS.............	800	14.51	.99	82
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	2,500	45.39	na	na
Accountants and Auditors........	130	2.33	5.26	73
Drafters........................	70	1.30	0.00	45
Electrical and Electronic Engineers.....................	700	12.62	0.00	36
Industrial Engineers............	40	.77	0.00	36
Purchasing Agents and/or Buyers.	60	.99	2.20	45
Systems Analysts, Scientific and Technical.....................	130	2.31	0.00	27
All Other Engineering Technicians..................	440	8.04	na	na
All Other Engineers............	190	3.44	na	na
All Other Professional Workers..	90	1.69	na	na
All Other Technical Workers.....	650	11.85	na	na
SERVICE OCCUPATIONS, TOTAL........	50	.89	na	na
Janitors, Porters, and Cleaners.	30	.48	16.78	55
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,220	22.14	na	na
Assemblers, Class C.............	340	6.23	5.29	27
Inspectors......................	210	3.75	1.17	36
Machinists......................	90	1.61	38.03	36
Maintenance Repairers, General Utility......................	40	.68	0.00	27

Table 49 (Continued) Machinery, Except Electrical, Austin SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
All Other Skilled Craftsmen and Kindred Workers..............	250	4.57	na	na
All Other Operatives and Semi-skilled Workers..............	270	4.96	na	na
All Other Laborers and Unskilled Workers.....................	2/			
CLERICAL OCCUPATIONS, TOTAL.......	930	16.92	na	na
Accounting Clerks...............	50	.88	0.00	36
Computer Operators..............	40	.79	0.00	27
General Clerks, Office..........	240	4.36	4.01	55
Production Clerks and/or Coordinators.................	90	1.70	1.28	45
Secretaries.....................	230	4.22	0.00	64
Shipping Packers................	30	.52	8.37	27
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	110	1.90	0.00	45
All Other Office Machine Operators.....................	30	.60	na	na
All Other Office Clerical Workers......................	80	1.36	na	na
All Other Plant Clerical Workers	30	.56	na	na
SALES OCCUPATIONS................	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	82
Accountants and Auditors...........................	73
Secretaries..	64
General Clerks, Office.............................	55
Janitors, Porters, and Cleaners....................	55

Table 50
SIC 352
Farm and Garden Machinery and Equipment
Statewide

This group includes establishments primarily engaged in manufacturing farm machinery and equipment, including wheel tractors. This industry also includes establishments manufacturing lawn mowers, garden tractors, and other lawn and garden equipment used for home lawn and garden care; and snowblowers and throwers for residential use.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,630	100.00	na	na
MANAGERS AND OFFICERS..............	300	8.33	6.21	91
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	150	4.27	na	na
Accountants and Auditors........	40	1.10	7.15	33
Drafters........................	40	1.19	4.15	26
All Other Professional and Technical Workers............	70	1.97	na	na
SERVICE OCCUPATIONS, TOTAL........	50	1.24	na	na
Janitors, Porters, and Cleaners.	50	1.24	14.07	41
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,590	71.15	na	na
Supervisors, Nonworking.........	190	5.14	4.31	41
Assemblers, Class C.............	210	5.72	10.90	39
Crane, Derrick, and Hoist Operators.....................	30	.83	0.00	7
Drill-Press and/or Boring Machine Operators.............	80	2.24	7.20	39
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers.....................	70	1.90	10.33	26
Grinding and/or Abrading Machine Operators, Metal.............	60	1.63	5.69	20
Industrial Truck Operators......	50	1.38	12.91	24

Table 50 (Continued) Farm and Garden Machinery and Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Lathe and/or Turning Machine Operators	70	1.88	7.28	28
Machine Assemblers, Class A	60	1.66	27.46	15
Machine Assemblers, Class B	50	1.35	2.30	9
Machine Tool Operators, Combination	40	1.02	10.76	17
Machinists	50	1.49	13.62	15
Painters, Production	90	2.54	9.40	70
Punch-Press Operators, Metal	130	3.48	18.67	41
Sawyers, Metal	40	.96	10.67	15
Sheet Metal Workers	110	2.98	15.35	22
Truck Drivers	50	1.38	11.46	22
Welders and Flamecutters-A	290	7.94	6.85	39
Welders and Flamecutters-B	270	7.33	6.02	48
Welders and Flamecutters-C	220	6.17	9.91	37
All Other Assemblers, Class B	70	2.05	na	na
All Other Skilled Craftsmen and Kindred Workers	100	2.77	na	na
All Other Operatives and Semiskilled Workers	160	4.33	na	na
All Other Laborers and Unskilled Workers	100	2.75	na	na
CLERICAL OCCUPATIONS, TOTAL	390	10.65	na	na
General Clerks, Office	90	2.35	7.69	50
Secretaries	70	1.79	16.39	54
Stock Clerks-Stockroom, Warehouse, or Storage Yard	40	1.07	12.25	28
All Other Office Clerical Workers	130	3.63	na	na
All Other Plant Clerical Workers	60	1.78	na	na
SALES OCCUPATIONS, TOTAL	150	4.27	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	150	4.12	12.30	61

1/ Based on unrounded data.

Table 50 (Continued) Farm and Garden Machinery and Equipment, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	91
Painters, Production	70
Sales Representatives, Sales Agents, and/or Sales Associates	61
Secretaries	54
General Clerks, Office	50

Table 51
SIC 354
Metalworking Machinery and Equipment
Statewide

This group includes establishments primarily engaged in manufacturing metalworking machinery and equipment, such as cutting and forming machine tools; machine tool accessories and measuring devices; power driven hand tools; rolling mill machinery and equipment; and metalworking machinery, not elsewhere classified. This group also includes tool and die shops making special dies and tools, die sets, jigs and fixtures, and industry molds.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	4,170	100.00	na	na
MANAGERS AND OFFICERS.............	420	10.05	7.23	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	230	5.38	na	na
Accountants and Auditors........	40	.84	18.15	25
Mechanical Engineers............	40	.88	11.42	23
All Other Professional and Technical Workers.............	150	3.65	na	na
SERVICE OCCUPATIONS, TOTAL........	60	1.51	na	na
Janitors, Porters, and Cleaners.	60	1.51	13.87	37
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,860	68.69	na	na
Supervisors, Nonworking.........	110	2.66	12.42	38
Assemblers, Class C.............	40	1.05	19.97	13
Drill-Press and/or Boring Machine Operators.............	200	4.90	3.29	15
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers.....................	90	2.06	25.67	10
Grinding and/or Abrading Machine Operators, Metal..............	160	3.82	23.87	20
Inspectors......................	60	1.49	10.75	12

Table 51 (Continued) Metalworking Machinery and Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Lathe and/or Turning Machine Operators....................	250	6.01	5.50	25
Machine Assemblers, Class A.....	40	.88	18.46	8
Machine Tool Operators, Combination..................	270	6.39	28.15	35
Machine Tool Operators, Numerical Control............	50	1.08	14.48	15
Machine Tool Setters...........	60	1.53	13.24	20
Machinists.....................	170	4.18	29.11	30
Milling and/or Planing Machine Operators....................	60	1.53	12.82	22
Order Fillers..................	60	1.32	4.37	8
Punch-Press Operators, Metal....	120	2.98	34.31	15
Tool and Die Makers............	310	7.45	14.72	53
Welders and Flamecutters-A......	50	1.15	37.67	20
Welders and Flamecutters-B......	40	.84	27.85	12
Welders and Flamecutters-C......	30	.76	11.07	10
All Other Assemblers, Class A...	40	.94	na	na
All Other Skilled Craftsmen and Kindred Workers..............	110	2.69	na	na
All Other Operatives and Semi-skilled Workers..............	460	11.03	na	na
All Other Laborers and Unskilled Workers.....................	80	1.90	na	na
CLERICAL OCCUPATIONS, TOTAL......	430	10.28	na	na
General Clerks, Office..........	70	1.73	18.90	33
Secretaries....................	100	2.28	12.75	45
Shipping Packers...............	30	.81	13.94	8
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	70	1.61	11.68	25
All Other Office Clerical Workers......................	110	2.59	na	na
All Other Plant Clerical Workers	50	1.25	na	na
SALES OCCUPATIONS, TOTAL.........	170	4.06	na	na
Sales Representatives, Sales Agents, and/or Sales Associates..................	150	3.53	15.96	30
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 51 (Continued) Metalworking Machinery and Equipment, Statewide

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Tool and Die Makers	53
Secretaries	45
Supervisors, Nonworking	38
Janitors, Porters, and Cleaners	37

Table 52
SIC 355
Special Industry Machinery, Except Metalworking Machinery
Statewide

This group includes establishments primarily engaged in manufacturing machinery for use by the food products and beverage manufacturing industries; textile industries, including parts, attachments, and accessories; and woodworking industries such as sawmills, planing mills, cabinet and furniture makers, pattern makers, and veneer workers. Also included in this group are establishments manufacturing machinery for the pulp, paper, and paper product industries; machinery and equipment used by the printing and bookbinding trades; and special industry machinery, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	7,640	100.00	na	na
MANAGERS AND OFFICERS.............	1,020	13.42	3.56	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	2,220	29.03	na	na
Accountants and Auditors........	150	2.02	8.78	41
Computer Programmers, Business..	160	2.05	1.42	10
Designers......................	50	.59	18.08	10
Drafters.......................	80	1.06	26.81	48
Electrical and Electronic Engineers....................	570	7.44	1.04	17
Electrical and Electronic Technicians..................	70	.90	29.35	21
Industrial Engineers............	50	.65	11.05	10
Mechanical Engineers............	80	1.00	24.71	34
Personnel and Labor Relations Specialists..................	40	.53	5.42	10
Purchasing Agents and/or Buyers.	80	1.01	8.56	38
All Other Engineering Technicians..................	270	3.53	na	na
All Other Engineers............	170	2.23	na	na
All Other Professional Workers..	40	.54	na	na
All Other Technical Workers.....	410	5.44	na	na
SERVICE OCCUPATIONS, TOTAL........	70	.93	na	na
Janitors, Porters, and Cleaners.	40	.57	23.81	41
All Other Service Workers.......	30	.35	na	na

Table 52 (Continued) Special Industry Machinery, Except Metalworking Machinery, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,130	40.96	na	na
Supervisors, Nonworking.........	180	2.36	24.18	45
Assemblers, Class C............	500	6.54	17.36	28
Drill-Press and/or Boring Machine Operators............	70	.86	18.04	31
Grinding and/or Abrading Machine Operators, Metal.............	60	.75	39.98	24
Inspectors.....................	220	2.92	3.24	21
Lathe and/or Turning Machine Operators....................	170	2.25	43.22	34
Machine Assemblers, Class A.....	230	3.06	38.64	24
Machine Assemblers, Class B.....	30	.40	29.15	14
Machine Tool Operators, Combination..................	100	1.34	39.86	34
Maintenance Repairers, General Utility......................	40	.52	7.87	10
Milling and/or Planing Machine Operators....................	80	.98	29.44	28
Welders and Flamecutters-A......	100	1.35	33.06	31
Welders and Flamecutters-B......	330	4.30	48.56	28
All Other Assemblers, Class B...	160	2.06	na	na
All Other Skilled Craftsmen and Kindred Workers..............	340	4.44	na	na
All Other Operatives and Semi-skilled Workers..............	390	5.12	na	na
All Other Laborers and Unskilled Workers.....................	130	1.68	na	na
CLERICAL OCCUPATIONS, TOTAL.......	1,080	14.11	na	na
Accounting Clerks..............	50	.64	15.87	24
General Clerks, Office.........	260	3.43	7.75	52
Production Clerks and/or Coordinators.................	120	1.52	11.04	34
Secretaries....................	240	3.15	5.77	69
Shipping Packers...............	40	.50	21.50	14
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	120	1.61	12.21	48
All Other Office Clerical Workers......................	200	2.65	na	na
All Other Plant Clerical Workers	50	.59	na	na

Table 52 (Continued) Special Industry Machinery, Except Metalworking Machinery, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	120	1.56	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	100	1.36	33.11	45
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	93
Secretaries..	69
General Clerks, Office...............................	52
Drafters...	48
Stock Clerks-Stockroom, Warehouse, or Storage Yard...	48

Table 53
SIC 357
Office, Computing, and Accounting Machines
Statewide

This group includes establishments engaged in manufacturing typewriters and parts; electronic computing equipment; calculating and accounting machines; scales and balances, except laboratory; and office machines, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	9,490	100.00	na	na
MANAGERS AND OFFICERS............	870	9.17	2.78	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	3,730	39.36	na	na
Accountants and Auditors........	70	.73	6.93	53
Computer Programmers, Business..	70	.76	5.31	26
Computer Programmers, Scientific and Technical................	250	2.64	10.06	37
Designers......................	30	.35	40.10	26
Drafters.......................	200	2.10	7.20	53
Electrical and Electronic Engineers......................	530	5.62	3.44	63
Electrical and Electronic Technicians..................	1,360	14.29	11.74	79
Industrial Engineers...........	40	.43	1.61	26
Mechanical Engineers...........	70	.77	21.97	32
Purchasing Agents and/or Buyers.	60	.65	9.17	47
Systems Analysts, Scientific and Technical................	340	3.53	13.47	21
Writers and/or Editors.........	30	.32	24.25	32
All Other Engineering Technicians..................	290	3.02	na	na
All Other Engineers............	240	2.52	na	na
All Other Professional and Technical Workers............	150	1.56	na	na
SERVICE OCCUPATIONS, TOTAL........	140	1.44	na	na
Janitors, Porters, and Cleaners.	120	1.22	11.60	32
All Other Service Workers.......	2/			

Table 53 (Continued) Office, Computing, and Accounting Machines, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,790	29.41	na	na
Supervisors, Nonworking.........	80	.88	1.58	26
Assemblers, Class C............	150	1.55	8.41	21
Electrical and Electronic Assemblers, Class A..........	1,000	10.57	.69	37
Electrical and Electronic Assemblers, Class B..........	200	2.12	19.31	47
Electro-Mechanical Equipment Assemblers, Class A..........	80	.80	32.55	16
Helpers, Trades................	40	.38	41.15	16
Inspectors.....................	270	2.81	16.10	42
Machine Tool Operators, Toolroom......................	120	1.25	39.97	16
Machinists.....................	90	.95	0.00	26
Sheet Metal Workers............	90	.89	4.48	21
All Other Assemblers, Class B...	240	2.57	na	na
All Other Skilled Craftsmen and Kindred Workers..............	250	2.61	na	na
All Other Operatives and Semi-skilled Workers..............	160	1.71	na	na
All Other Laborers and Unskilled Workers.....................	[2]			
CLERICAL OCCUPATIONS, TOTAL.......	1,550	16.25	na	na
Clerical Supervisors, Office or Plant.......................	30	.34	11.75	26
Accounting Clerks..............	160	1.72	10.49	42
Computer Operators.............	70	.71	8.36	42
General Clerks, Office.........	190	2.01	10.34	53
Keypunch Operators.............	50	.47	8.46	32
Production Clerks and/or Coordinators.................	90	.97	6.88	42
Secretaries....................	430	4.50	3.82	84
Typists........................	110	1.14	6.98	16
Shipping and/or Receiving Clerks......................	90	.96	4.50	42
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	110	1.10	8.58	53
All Other Clerical Workers......	220	2.26	na	na

Table 53 (Continued) Office, Computing, and Accounting Machines, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	410	4.36	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	410	4.36	7.50	53

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	100
Secretaries..	84
Electrical and Electronic Technicians................	79
Electrical and Electronic Engineers..................	63

SIC 37
TRANSPORTATION EQUIPMENT

In Texas, the bulk of the Transportation Equipment Industries' occupational employment is centered in three major segments--Motor Vehicles and Equipment, Aircraft and Parts, and Ship and Boat Building. The June 1977 employment of these three major segments was 14,110, 40,240, and 9,620, respectively. The combined employment for these groups represent 86 percent of the total industry employment.

The manufacturers of Transportation Equipment, once Texas' largest employer, has steadily cut back employment since 1970 mainly because fewer aircraft are being built. The Aircraft segment depends primarily on large purchase contracts that are secured irregularly. Nevertheless, there is a continuing growth in Texas plants turning out boats, trailers, and mobile homes. The Transportation Equipment Industry is concentrated most heavily in the Dallas-Fort Worth area, but coastal shipyards also contribute significantly to employment in this industry.

Erratic employment is expected to abate at the major industry level. Increased demands for all types of Transportation Equipment will push employment upward through the mid-1980's.

Average Annual Employment for Transportation Equipment*

1975	67,200
1976	66,300
1977	64,400

*Source: Current Employment Statistics Program.

Table 54
SIC 37
Transportation Equipment
Statewide

This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment, such as motorcycles, bicycles, and snowmobiles.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	74,220	100.00	na	na
MANAGERS AND OFFICERS............	5,350	7.16	4.59	95
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	12,760	17.18	na	na
Accountants and Auditors........	950	1.27	4.92	32
Aeronautical Engineers..........	3,230	4.32	14.65	7
Chemists........................	50	.06	12.00	4
Civil Engineers.................	60	.08	38.54	2
Commercial Artists..............	210	.28	10.79	6
Computer Programmers, Business..	200	.26	9.15	13
Computer Programmers, Scientific and Technical................	140	.18	8.65	5
Designers.......................	60	.07	41.17	7
Drafters........................	490	.65	6.66	25
Electrical and Electronic Engineers.....................	660	.87	8.36	8
Electrical and Electronic Technicians...................	400	.53	14.09	10
Industrial Engineers............	600	.80	10.42	17
Mathematicians..................	80	.10	16.77	2
Mechanical Engineering Technicians...................	160	.21	25.45	2
Mechanical Engineers............	370	.49	7.69	16
Metallurgists and Metallurgical Engineers.....................	50	.06	9.16	4
Nurses, Professional............	50	.06	4.42	10
Personnel and Labor Relations Specialists...................	330	.43	12.80	22

Table 54 (Continued) Transportation Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
Purchasing Agents and/or Buyers.	770	1.02	5.88	48
Systems Analysts, Business......	320	.42	7.22	10
Systems Analysts, Scientific and Technical....................	250	.33	4.01	4
Tool Programmers, Numerical Control......................	70	.09	8.64	5
Writers and/or Editors..........	380	.51	8.59	8
All Other Engineering Technicians..................	340	.45	na	na
All Other Engineers............	1,890	2.55	na	na
All Other Professional Workers..	580	.78	na	na
All Other Technical Workers.....	70	.10	na	na
SERVICE OCCUPATIONS, TOTAL........	1,600	2.14	na	na
Supervisors, Nonworking-Service.	90	.11	7.56	8
Guards and Doorkeepers..........	550	.73	3.51	13
Janitors, Porters, and Cleaners.	890	1.19	5.75	45
All Other Service Workers.......	70	.09	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	44,750	60.32	na	na
Supervisors, Nonworking.........	2,400	3.21	5.34	56
Aircraft Structure and Surfaces Assemblers, Class B..........	640	.86	22.22	4
Assemblers, Class C............	4,990	6.69	24.50	33
Boilermakers...................	100	.13	15.87	2
Carpenters.....................	1,230	1.64	47.09	27
Crane, Derrick, and Hoist Operators....................	160	.21	3.00	10
Delivery and Route Workers......	40	.05	38.27	4
Dip Platers, Nonelectrolytic....	50	.06	41.62	3
Drill-Press and/or Boring Machine Operators............	280	.37	15.42	12
Electrical and Electronic Assemblers, Class A...........	270	.35	15.54	3
Electrical and Electronic Assemblers, Class B..........	490	.65	9.48	3
Electricians..................	530	.71	7.37	24
Electro-Mechanical Assemblers, Class B......................	250	.33	28.55	4
Electroplaters.................	110	.15	13.14	7

Table 54 (Continued) Transportation Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Fabricators, Plastics	90	.12	24.19	3
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	610	.81	18.01	22
Grinding and/or Abrading Machine Operators, Metal	390	.52	23.38	12
Heat Treaters, Annealers, and/or Temperers	70	.08	9.33	3
Helpers, Trades	720	.96	10.69	18
Industrial Truck Operators	350	.46	10.48	21
Inspectors	1,670	2.23	3.39	30
Instrument Mechanics	120	.16	17.09	3
Laminators, Preforms	1,270	1.70	17.81	13
Lathe and/or Turning Machine Operators	780	1.04	6.49	13
Lay-Out Markers, Metal	150	.19	10.53	8
Machine Tool Operators, Combination	700	.93	35.06	13
Machine Tool Operators, Numerical-Control	330	.44	21.59	7
Machine Tool Operators, Toolroom	110	.14	20.76	3
Machinists	500	.67	17.52	19
Maintenance Repairers, General Utility	220	.28	24.01	20
Mechanics, Aircraft	1,330	1.77	4.33	7
Mechanics, Automotive	210	.28	18.66	15
Mechanics, Maintenance	350	.47	13.83	14
Milling and/or Planing Machine Operators	650	.86	29.52	7
Millwrights	180	.24	10.11	4
Oilers	60	.08	5.67	5
Order Fillers	70	.08	38.41	5
Painters, Maintenance	140	.18	10.49	10
Painters, Production	1,160	1.54	8.14	44
Patternmakers, Metal	160	.21	11.75	5
Plater Helpers	70	.09	11.92	4
Plumbers and/or Pipefitters	390	.52	8.82	12
Power Brake and/or Bending Machine Operators, Metal	190	.25	21.84	13
Production Packagers, Hand or Machine	150	.19	20.39	5

Table 54 (Continued) Transportation Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Punch-Press Operators, Metal....	230	.30	34.33	15
Riggers........................	140	.19	1.43	4
Riveters, Heavy................	70	.08	20.81	2
Riveters, Light................	80	.10	15.18	4
Sawyers, Metal.................	60	.07	21.24	7
Sewing Machine Operators, Regular Equipment-Nongarment..	100	.13	22.25	5
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment..........	60	.07	43.62	4
Shear and/or Slitter Operators, Metal........................	110	.14	48.38	10
Sheet Metal Workers............	1,370	1.83	43.12	16
Shipfitters....................	940	1.25	3.92	5
Stationary Engineers...........	130	.17	3.91	5
Testers........................	220	.28	23.25	4
Tool and Die Makers............	500	.66	14.56	15
Truck Drivers..................	510	.68	22.30	37
Welders and Flamecutters-A......	1,900	2.54	15.26	24
Welders and Flamecutters-B......	2,810	3.75	37.78	33
Welders and Flamecutters-C......	720	.96	21.86	19
Woodworking Machine Operators...	190	.25	34.46	9
All Other Assemblers, Class A...	2,670	3.61	na	na
All Other Assemblers, Class B...	1,050	1.42	na	na
All Other Mechanics and Repairers....................	300	.39	na	na
All Other Skilled Craftsmen and Kindred Workers..............	1,120	1.51	na	na
All Other Operatives and Semi-skilled Workers..............	2,270	3.07	na	na
All Other Laborers and Unskilled Workers......................	2,470	3.30	na	na
CLERICAL OCCUPATIONS, TOTAL......	9,090	12.24	na	na
Clerical Supervisors, Office or Plant........................	280	.37	19.12	15
Accounting Clerks..............	360	.47	11.51	28
Bookkeepers, Hand..............	70	.09	21.23	11
Computer Operators.............	120	.15	4.78	13
File Clerks....................	110	.14	9.55	12
General Clerks, Office..........	1,190	1.58	14.27	46
Keypunch Operators.............	210	.27	6.78	15

Table 54 (Continued) Transportation Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Order Clerks	70	.09	27.93	11
Payroll and/or Timekeeping Clerks	200	.26	6.61	25
Peripheral EDP Equipment Operators	60	.07	32.77	3
Personnel Clerks	140	.18	15.74	19
Procurement Clerks	120	.16	19.99	13
Production Clerks and/or Coordinators	1,100	1.46	4.21	26
Receptionists	60	.07	28.85	10
Secretaries	1,110	1.49	6.54	56
Shipping and/or Receiving Clerks	260	.35	14.67	28
Shipping Packers	260	.35	20.45	16
Statistical Clerks	100	.12	10.02	6
Stenographers	680	.91	3.10	8
Stock Clerks-Stockroom, Warehouse, or Storage Yard	1,050	1.41	4.04	31
Switchboard Operator-Receptionists	70	.08	19.38	21
Switchboard Operators	70	.09	8.41	10
Typists	420	.56	7.32	18
All Other Office Machine Operators	160	.21	na	na
All Other Office Clerical Workers	660	.88	na	na
All Other Plant Clerical Workers	160	.21	na	na
SALES OCCUPATIONS, TOTAL	670	.90	na	na
Sales Representatives, Sales Agents, and/or Sales Associates	650	.87	17.13	39
All Other Sales Workers	[2]			

[1] Based on unrounded data.
[2] Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	95
Secretaries	56
Supervisors, Nonworking	56
Purchasing Agents and/or Buyers	48
General Clerks, Office	46

Table 55
SIC 37
Transportation Equipment
Dallas-Fort Worth SMSA

This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment, such as motorcycles, bicycles, and snowmobiles.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	40,840	100.00	na	na
MANAGERS AND OFFICERS.............	3,260	7.99	6.55	93
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	8,960	21.94	na	na
Accountants and Auditors........	750	1.83	5.47	37
Aeronautical Engineers..........	2,990	7.34	15.80	8
Commercial Artists..............	190	.47	11.66	7
Computer Programmers, Business..	150	.36	12.10	17
Computer Programmers, Scientific and Technical................	120	.29	9.72	8
Drafters........................	200	.47	8.27	20
Electrical and Electronic Technicians..................	250	.61	19.94	8
Industrial Engineers............	520	1.26	12.14	17
Mechanical Engineers............	290	.70	9.67	24
Metallurgists and Metallurgical Engineers.....................	40	.10	10.82	8
Personnel and Labor Relations Specialists..................	220	.52	11.68	22
Purchasing Agents and/or Buyers.	520	1.26	7.08	49
Systems Analysts, Business......	200	.50	11.25	10
Systems Analysts, Scientific and Technical.....................	130	.31	7.72	5
Tool Programmers, Numerical Control.......................	60	.14	9.60	10
Writers and/or Editors..........	300	.74	10.90	10
All Other Engineering Technicians..................	370	.91	na	na
All Other Engineers.............	1,370	3.36	na	na

Table 55 (Continued) Transportation Equipment, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
All Other Professional Workers..	250	.62	na	na
All Other Technical Workers.....	40	.09	na	na
SERVICE OCCUPATIONS, TOTAL........	980	2.40	na	na
Supervisors, Nonworking-Service.	50	.11	13.17	7
Guards and Doorkeepers..........	350	.85	4.29	14
Janitors, Porters, and Cleaners.	560	1.38	5.21	46
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	21,330	52.27	na	na
Supervisors, Nonworking.........	940	2.31	6.84	49
Assemblers, Class A.............	2,740	6.71	11.16	12
Assemblers, Class C.............	2,350	5.76	10.66	44
Carpenters......................	130	.31	20.45	25
Delivery and Route Workers......	30	.08	43.83	7
Dip Plater, Nonelectrolytic.....	50	.11	44.31	5
Drill-Press and/or Boring Machine Operators.............	250	.61	14.73	22
Electricians....................	180	.44	11.21	20
Electro-Mechanical Assemblers, Class B......................	240	.57	29.57	7
Electroplaters..................	100	.23	15.19	8
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers.....................	330	.81	22.52	20
Grinding and/or Abrading Machine Operators, Metal......	260	.64	34.84	19
Heat Treaters, Annealers, and/or Temperers.....................	60	.13	9.30	5
Helpers, Trades.................	90	.22	40.05	12
Industrial Truck Operators......	210	.50	11.17	29
Inspectors......................	1,150	2.80	3.31	32
Instrument Mechanics............	110	.27	18.28	5
Laminators, Preforms............	420	1.01	13.21	12
Lathe and/or Turning Machine Operators.....................	600	1.47	6.21	12
Lay-Out Markers, Metal..........	60	.13	18.77	8
Machine Tool Operators, Combination..................	470	1.14	47.26	19
Machine Tool Operators, Numerical Control............	170	.41	19.52	8

Table 55 (Continued) Transportation Equipment, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Machine Tool Operators, Toolroom......................	100	.24	22.81	7
Machinists......................	190	.47	42.82	14
Maintenance Repairers, General Utility......................	80	.19	21.97	15
Mechanics, Aircraft............	240	.58	15.34	8
Mechanics, Automotive...........	70	.16	21.78	12
Mechanics, Maintenance..........	180	.45	7.21	14
Milling and/or Planing Machine Operators....................	600	1.47	31.59	12
Oilers.........................	40	.10	8.18	8
Order Fillers...................	60	.13	44.36	8
Painters, Maintenance...........	70	.16	19.83	10
Painters, Production............	510	1.24	10.12	41
Patternmakers, Metal............	140	.34	13.24	7
Plater Helpers..................	50	.12	14.16	5
Plumbers and/or Pipefitters.....	110	.26	11.16	8
Power Brake and/or Bending Machine Operators, Metal......	100	.23	12.74	22
Production Packagers, Hand or Machine......................	150	.35	20.76	12
Punch-Press Operators, Metal....	100	.25	22.23	22
Sawyers, Metal..................	40	.09	28.22	8
Sewing Machine Operators, Regular Equipment-Nongarment..	40	.10	39.36	7
Sheet Metal Workers.............	320	.79	10.32	17
Stationary Engineers............	120	.29	4.11	8
Testers........................	210	.51	23.89	7
Tool and Die Makers.............	430	1.04	16.88	19
Truck Drivers...................	260	.64	27.64	41
Welders and Flamecutters-B......	640	1.57	23.94	36
Welders and Flamecutters-C......	130	.32	22.27	19
Woodworking Machine Operators...	30	.08	37.31	8
All Other Assemblers, Class B...	1,190	2.91	na	na
All Other Mechanics and Repairers....................	60	.15	na	na
All Other Skilled Craftsmen and Kindred Workers...............	1,320	3.23	na	na
All Other Operatives and Semi-skilled Workers..............	2,070	5.08	na	na
All Other Laborers and Unskilled Workers......................	740	1.81	na	na

Table 55 (Continued) Transportation Equipment, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	6,090	14.87	na	na
Clerical Supervisors, Office or Plant.........................	240	.57	22.64	19
Accounting Clerks...............	210	.51	16.14	32
Bookkeepers, Hand...............	40	.09	20.36	14
Computer Operators..............	70	.17	7.09	17
File Clerks.....................	60	.15	14.81	19
General Clerks, Office..........	810	1.98	19.45	49
Keypunch Operators..............	160	.38	8.70	20
Order Clerks....................	50	.11	35.96	17
Payroll and/or Timekeeping Clerks........................	130	.31	9.89	31
Peripheral EDP Equipment Operators.....................	60	.13	33.94	5
Personnel Clerks................	90	.22	19.98	19
Procurement Clerks..............	50	.11	18.66	14
Production Clerks and/or Coordinators..................	770	1.87	4.91	27
Secretaries.....................	770	1.89	8.14	61
Shipping and/or Receiving Clerks	150	.35	12.66	34
Shipping Packers................	220	.54	24.26	22
Statistical Clerks..............	60	.15	14.73	8
Stenographers...................	510	1.25	3.35	8
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	670	1.63	5.73	24
Switchboard Operators...........	50	.13	10.75	17
Typists.........................	200	.49	14.96	20
All Other Office Machine Operators.....................	90	.21	na	na
All Other Office Clerical Workers	510	1.25	na	na
All Other Plant Clerical Workers	120	.28	na	na
SALES OCCUPATIONS, TOTAL..........	220	.52	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	220	.52	22.07	41

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

Table 55 (Continued) Transportation Equipment, Dallas-Fort Worth SMSA

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	93
Secretaries	61
General Clerks, Office	49
Purchasing Agents and/or Buyers	49
Supervisors, Nonworking	49

Table 56
SIC 37
Transportation Equipment
San Antonio SMSA

This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment, such as motorcycles, bicycles, and snowmobiles.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	2,210	100.00	na	na
MANAGERS AND OFFICERS.............	190	8.41	6.12	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	180	8.33	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	1,620	73.28	na	na
Supervisors, Nonworking.........	150	6.69	2.40	44
Assemblers, Class C............	60	2.89	11.27	25
Inspectors.....................	130	5.83	3.61	38
Machinists.....................	50	2.26	29.02	44
Sheet Metal Workers............	130	5.83	48.96	19
Welders and Flamecutters-A......	30	1.26	18.14	44
Welders and Flamecutters-B......	120	5.24	28.81	31
All Other Skilled Craftsmen and and Kindred Workers...........	240	10.70	na	na
All Other Operatives and Semi-skilled Workers..............	540	24.44	na	na
All Other Laborers and Unskilled Workers.....................	170	7.92	na	na
CLERICAL OCCUPATIONS, TOTAL.......	180	8.01	na	na
Secretaries....................	40	1.58	11.55	75
All Other Clerical Workers......	140	6.42	na	na

Table 56 (Continued) Transportation Equipment, San Antonio SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	40	1.58	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	40	1.58	15.71	31

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers...............................	100
Secretaries..	75

Table 57
SIC 371
Motor Vehicles and Motor Vehicle Equipment
Statewide

This group includes establishments engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars, buses, and special purpose motor vehicles; passenger car bodies; truck and bus bodies; truck trailers and truck trailer chassis; and motor vehicle parts and accessories.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	14,110	100.00	na	na
MANAGERS AND OFFICERS............	640	4.51	13.18	94
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	470	3.31	na	na
Accountants and Auditors........	70	.48	19.77	38
Drafters.......................	60	.45	29.12	21
Industrial Engineers...........	40	.31	16.78	13
Mechanical Engineers...........	30	.21	37.85	19
Personnel and Labor Relations Specialists..................	40	.27	17.93	25
Purchasing Agents and/or Buyers.	80	.53	27.82	50
All Other Engineering Technicians..................	40	.28	na	na
All Other Engineers............	60	.39	na	na
All Other Professional and Technical Workers............	50	.36	na	na
SERVICE OCCUPATIONS, TOTAL........	290	2.04	na	na
Guards and Doorkeepers..........	40	.26	10.50	6
Janitors, Porters, and Cleaners.	240	1.68	9.23	52
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	11,350	80.60	na	na
Supervisors, Nonworking.........	420	2.99	12.10	60
Assemblers, Class C............	2,940	20.85	13.97	40

Table 57 (Continued) Motor Vehicles and Motor Vehicle Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Carpenters	130	.92	7.94	13
Electricians	60	.44	16.18	13
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	230	1.65	40.39	25
Industrial Truck Operators	130	.91	14.39	27
Inspectors	100	.67	31.89	23
Lathe and/or Turning Machine Operators	160	1.15	.51	8
Maintenance Repairers, General Utility	60	.42	28.20	17
Mechanics, Automotive	110	.80	28.88	15
Mechanics, Maintenance	50	.35	20.50	10
Order Fillers	50	.36	48.35	6
Painters, Production	410	2.93	14.70	58
Power Brake and/or Bending Machine Operators, Metal	100	.68	42.97	21
Riveters, Light	60	.43	19.85	6
Sheet Metal Workers	320	2.26	10.58	17
Truck Drivers	220	1.56	42.35	44
Welders and Flamecutters-A	650	4.61	42.77	29
Welders and Flamecutters-B	890	6.27	27.77	38
Welders and Flamecutters-C	470	3.33	31.94	27
All Other Skilled Craftsmen and Kindred Workers	310	2.22	na	na
All Other Operatives and Semi-skilled Workers	2,590	18.38	na	na
All Other Laborers and Unskilled Workers	890	6.30	na	na
CLERICAL OCCUPATIONS, TOTAL	1,160	8.15	na	na
Accounting Clerks	110	.80	27.66	35
Bookkeepers, Hand	40	.24	23.47	15
General Clerks, Office	180	1.26	33.36	40
Keypunch Operators	30	.22	34.46	19
Order Clerks	30	.24	45.90	17
Payroll and/or Timekeeping Clerks	40	.29	19.80	33
Production Clerks and/or Coordinators	120	.87	28.79	31

Table 57 (Continued) Motor Vehicles and Motor Vehicle Equipment, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Secretaries.....................	110	.75	18.14	54
Shipping and/or Receiving Clerks	90	.60	19.91	33
Shipping Packers................	100	.72	49.13	23
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	70	.46	34.95	27
All Other Office Machine Operators.....................	50	.35	na	na
All Other Clerical Workers......	190	1.31	na	na
SALES OCCUPATIONS, TOTAL..........	200	1.38	na	na
Sales Representatives, Sales Agents, and/or Sales Associates....................	190	1.34	23.30	42
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	94
Supervisors, Nonworking..............................	60
Painters, Production.................................	58
Secretaries..	54
Janitors, Porters, and Cleaners......................	52

Table 58
SIC 372
Aircraft and Parts
Statewide

This group includes establishments primarily engaged in manufacturing or assembling complete aircraft, aircraft engines, propellers, and other aircraft parts and auxiliary equipment. Research and development is also included in this industry group. Excluded are primary manufacturers of aeronautical instruments, aeronautical electrical equipment, and guided missile and space vehicle parts.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	40,240	100.00	na	na
MANAGERS AND OFFICERS............	3,640	9.05	5.61	100
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	11,200	27.90	na	na
Accountants and Auditors........	800	1.99	4.83	46
Aeronautical Engineers..........	3,220	8.01	14.68	29
Chemists......................	40	.10	14.57	11
Commercial Artists.............	200	.49	11.32	20
Computer Programmers, Business..	170	.43	8.73	26
Computer Programmers, Scientific and Technical................	130	.32	8.91	17
Drafters......................	310	.77	4.64	43
Electrical and Electronic Engineers....................	510	1.27	10.69	23
Electrical and Electronic Technicians..................	350	.86	15.94	26
Industrial Engineers............	540	1.35	11.49	40
Mechanical Engineers............	270	.67	9.61	26
Metallurgists and Metallurgical Engineers....................	30	.08	13.75	17
Personnel and Labor Relations Specialists..................	220	.53	11.22	31
Purchasing Agents and/or Buyers.	530	1.32	5.73	54
Statisticians..................	30	.07	22.69	11
Systems Analysts, Business......	270	.67	8.50	26
Systems Analysts, Scientific and Technical....................	250	.60	4.00	14

Table 58 (Continued) Aircraft and Parts, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1/]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PROFESSIONAL AND TECHNICAL OCCUPATIONS (Continued)				
Tool Programmers, Numerical Control	70	.17	8.76	23
Writers and/or Editors	370	.92	8.84	23
All Other Engineering Technicians	380	.95	na	na
All Other Engineers	1,870	4.64	na	na
All Other Professional Workers	590	1.47	na	na
All Other Technical Workers	50	.12	na	na
SERVICE OCCUPATIONS, TOTAL	1,000	2.48	na	na
Supervisors, Nonworking-Service	70	.16	9.46	14
Guards and Doorkeepers	400	.98	3.74	20
Janitors, Porters, and Cleaners	480	1.20	5.42	49
All Other Service Workers	50	.13	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	17,580	43.65	na	na
Supervisors, Nonworking	1,180	2.94	4.84	63
Aircraft Structure and Surfaces Assemblers, Class B	640	1.60	22.22	17
Assemblers, Class C	230	.56	22.34	23
Carpenters	70	.18	9.86	34
Dip Platers, Non-Electrolytic	40	.10	14.35	11
Drill-Press and/or Boring Machine Operators	190	.46	12.01	23
Electrical and Electronic Assemblers, Class A	260	.65	15.68	11
Electrical and Electronic Assemblers, Class B	490	1.21	9.37	11
Electricians	180	.45	10.34	34
Electro-Mechanical Assemblers, Class B	220	.53	31.64	9
Electroplaters	110	.27	13.26	29
Fabricators, Plastics	70	.18	22.61	11
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	210	.51	15.51	20
Grinding and/or Abrading Machine Operators, Metal	230	.57	9.22	29
Heat Treaters, Annealers, and/or Temperers	70	.16	9.33	14

Table 58 (Continued) Aircraft and Parts, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Helpers, Trades.................	40	.09	18.56	17
Industrial Truck Operators......	80	.19	13.75	14
Inspectors......................	1,460	3.61	2.11	69
Instrument Mechanics............	100	.25	20.24	9
Laminators, Preforms............	270	.67	10.26	14
Lathe and/or Turning Machine Operators.....................	590	1.47	8.56	37
Lay-Out Markers, Metal..........	70	.16	5.79	14
Machine Assemblers, Class B.....	70	.16	27.77	9
Machine Tool Operators, Combination..................	460	1.13	47.19	37
Machine Tool Operators, Numerical Control............	220	.53	18.10	23
Machine Tool Operators, Toolroom.....................	100	.25	22.81	11
Machinists......................	300	.74	29.13	46
Maintenance Repairers, General Utility......................	70	.18	18.23	26
Mechanics, Aircraft............	1,250	3.10	4.61	31
Mechanics, Automotive...........	50	.11	5.91	17
Mechanics, Maintenance..........	210	.51	4.64	26
Milling and/or Planing Machine Operators....................	630	1.57	30.17	26
Oilers.........................	40	.09	9.51	11
Painters, Maintenance...........	50	.13	8.67	11
Painters, Production............	380	.93	11.23	34
Patternmakers, Metal............	150	.37	7.95	17
Plater Helpers..................	70	.18	11.92	17
Plumbers and/or Pipefitters.....	50	.13	14.23	9
Power Brake and/or Bending Machine Operators, Metal......	50	.12	4.82	14
Production Packagers, Hand or Machine......................	90	.22	16.68	9
Punch-Press Operators, Metal....	60	.14	17.27	17
Sawyers, Metal..................	40	.09	8.01	11
Sewing Machine Operators, Regular Equipment-Nongarment..	60	.13	30.45	14
Sheet Metal Workers.............	270	.66	24.11	26
Stationary Engineers............	120	.29	4.25	14
Testers.........................	190	.45	26.38	11

Table 58 (Continued) Aircraft and Parts, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Tool and Die Makers.............	470	1.17	15.21	46
Truck Drivers..................	90	.22	9.81	26
Welders and Flamecutters-A......	120	.29	15.52	31
Welders and Flamecutters-B......	70	.16	23.21	17
Welders and Flamecutters-C......	80	.18	18.21	17
All Other Assemblers, Class A...	2,550	6.34	na	na
All Other Assemblers, Class B...	40	.10	na	na
All Other Mechanics and Repairers....................	130	.32	na	na
All Other Skilled Craftsmen and Kindred Workers..............	950	2.37	na	na
All Other Operatives and Semi-skilled Workers..............	930	2.32	na	na
All Other Laborers and Unskilled Workers......................	370	.90	na	na
CLERICAL OCCUPATIONS, TOTAL.......	6,650	16.49	na	na
Clerical Supervisors, Office or Plant........................	230	.56	23.16	29
Accounting Clerks..............	150	.36	10.41	37
Computer Operators.............	100	.23	5.15	26
File Clerks....................	80	.20	7.18	26
General Clerks, Office.........	730	1.81	20.53	43
Keypunch Operators.............	160	.39	5.39	31
Payroll and/or Timekeeping Clerks......................	120	.30	8.03	31
Peripheral EDP Equipment Operators....................	30	.08	15.99	9
Personnel Clerks...............	100	.23	18.78	37
Procurement Clerks.............	70	.18	9.82	23
Production Clerks and/or Coordinators.................	890	2.20	2.09	46
Secretaries....................	790	1.95	7.77	77
Shipping and/or Receiving Clerks	90	.22	11.97	40
Shipping Packers...............	140	.34	14.43	20
Statistical Clerks.............	80	.20	10.47	14
Stenographers..................	660	1.63	3.17	20
Stock Clerks-Stockroom, Warehouse, or Storage Yard........	840	2.08	3.88	40

Table 58 (Continued) Aircraft and Parts, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Switchboard Operators...........	60	.14	4.40	29
Typists.........................	370	.91	7.78	49
All Other Office Machine Operators....................	140	.35	na	na
All Other Office Clerical Workers......................	680	1.68	na	na
All Other Plant Clerical Workers	140	.34	na	na
SALES OCCUPATIONS................	170	.42	na	na

1/ Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	100
Secretaries..	77
Inspectors...	69
Supervisors, Nonworking..............................	63
Purchasing Agents and/or Buyers......................	54

Table 59
SIC 373
Ship and Boat Building and Repairing
Statewide

This group includes establishments primarily engaged in building and repairing all types of boats, ships, barges, and lighters, whether propelled by sail or motor power or towed by other craft. This industry also includes the conversion and alteration of ships. Excluded are primary manufacturers of rubber and nonrigid plastic boats; fabricators of structural assemblies or components for ships; and subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	9,620	100.00	na	na
MANAGERS AND OFFICERS.............	540	5.61	17.13	94
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL...............	380	3.90	na	na
Drafters.......................	80	.80	4.19	23
Personnel and Labor Relations Specialists..................	30	.32	8.43	31
Purchasing Agents and/or Buyers.	40	.39	15.24	46
All Other Engineering Technicians..................	30	.31	na	na
All Other Professional and Technical Workers............	200	2.06	na	na
SERVICE OCCUPATIONS, TOTAL........	180	1.87	na	na
Guards and Doorkeepers..........	90	.90	0.00	23
Janitors, Porters, and Cleaners.	80	.81	26.77	37
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	7,880	81.93	na	na
Supervisors, Nonworking.........	450	4.68	7.68	60
Assemblers, Class C............	300	3.15	39.86	29
Boilermakers...................	60	.66	10.02	9

Table 59 (Continued) Ship and Boat Building and Repairing, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Carpenters	200	2.11	10.85	43
Crane, Derrick, and Hoist Operators	130	1.33	2.59	26
Electricians	210	2.22	1.70	34
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	70	.67	47.44	26
Helpers, Trades	510	5.26	10.56	37
Industrial Truck Operators	50	.47	0.00	14
Inspectors	50	.46	15.99	17
Laminators, Preforms	910	9.49	23.15	40
Lay-Out Markers, Metal	60	.61	0.00	11
Machinists	150	1.57	8.49	17
Mechanics, Maintenance	40	.39	34.39	17
Millwrights	150	1.59	9.92	14
Painters, Maintenance	60	.63	9.46	23
Painters, Production	190	1.98	12.25	49
Plumbers and/or Pipefitters	220	2.27	3.10	26
Riggers	130	1.39	0.00	11
Shipfitters	940	9.78	3.92	26
Truck Drivers	60	.61	20.04	31
Welders and Flamecutters-A	890	9.24	3.53	14
Welders and Flamecutters-B	650	6.78	16.87	37
Woodworking Machine Operators	80	.84	47.36	17
All Other Mechanics and Repairers	90	.94	na	na
All Other Skilled Craftsmen and Kindred Workers	140	1.41	na	na
All Other Operatives and Semiskilled Workers	510	5.30	na	na
All Other Laborers and Unskilled Workers	580	6.00	na	na
CLERICAL OCCUPATIONS, TOTAL	610	6.37	na	na
Accounting Clerks	40	.40	1.96	26
General Clerks, Office	120	1.28	26.33	49
Production Clerks and/or Coordinators	30	.34	0.00	11
Secretaries	90	.97	12.38	51

Table 59 (Continued) Ship and Boat Building and Repairing, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Stock Clerks-Stockroom, Warehouse, or Storage Yard.........	110	1.17	9.03	49
All Other Office Clerical Workers......................	150	1.51	na	na
All Other Plant Clerical Workers	70	.68	na	na
SALES OCCUPATIONS, TOTAL..........	30	.31	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	30	.31	41.90	26

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers...............................	94
Supervisors, Nonworking.............................	60
Secretaries...	51
General Clerks, Office..............................	49
Painters, Production................................	49
Stock Clerks-Stockroom, Warehouse, or Storage Yard...	49

SIC 38
Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks

Three hundred operating units employ approximately 18,000 workers (June 1977) in this total industry group. These employees are divided into three important divisions--Engineering and Research Instruments; Measuring and Controlling Instruments; and Surgical, Medical, and Dental Instruments (the latter being the only publishable division). These three main categories represent respective employment of 24, 23, and 24 percent.

In the Surgical, Medical, and Dental Instruments category, Class C Assemblers make up a significant percent of the total employment (24 percent). Manufacturers in this division have experienced a good demand for their products in spite of unstable economic conditions. Technological advances coupled with continuing health care needs and a large export market should prove promising for this segment of the industry. Even though employment has moderated in recent years it is expected to remain stable over the next decade.

Average Annual Employment for Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks*

1975	17,300
1976	17,400
1977	18,000

*Source: Current Employment Statistics Program.

Table 60
SIC 384
Surgical, Medical, and Dental Instruments and Supplies
Statewide

This group includes establishments primarily engaged in manufacturing medical, surgical, opthalmic, and veterinary instruments and apparatus; orthopedic, prosthetic, and surgical appliances and supplies; and artificial teeth, dental metals, alloys and amalgams, and other dental equipment, instruments, and supplies.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	4,080	100.00	na	na
MANAGERS AND OFFICERS.............	380	9.28	8.65	84
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	410	9.95	na	na
SERVICE OCCUPATIONS, TOTAL........	70	1.59	na	na
Janitors, Porters, and Cleaners.	70	1.59	20.59	24
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,740	67.12	na	na
Supervisors, Nonworking.........	70	1.62	18.13	24
Assemblers, Class C.............	990	24.20	14.66	20
Inspectors......................	30	.81	45.73	16
Machinists......................	40	.93	14.56	12
Production Packagers, Hand or Machine......................	120	3.02	13.35	16
All Other Skilled Craftsmen and Kindred Workers...............	510	12.40	na	na
All Other Operatives and Semi-skilled Workers...............	820	20.11	na	na
All Other Laborers and Unskilled Workers......................	160	4.03	na	na
CLERICAL OCCUPATIONS, TOTAL.......	430	10.78	na	na
Accounting Clerks...............	40	1.03	19.95	24
General Clerks, Office..........	70	1.81	35.18	56

Table 60 (Continued) Surgical, Medical, and Dental Instruments and Supplies, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
Production Clerks and/or Coordinators	50	1.13	0.00	12
Secretaries	120	2.94	18.86	56
All Other Office Clerical Workers	120	3.05	na	na
All Other Plant Clerical Workers	30	.81	na	na
SALES OCCUPATIONS	50	1.13	na	na

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	84
General Clerks, Office	56
Secretaries	56

SIC 39
MISCELLANEOUS MANUFACTURING INDUSTRIES

A large number of specialized manufacturers are represented in Texas. The Miscellaneous Manufacturing category, as defined by the U. S. Department of Commerce, includes an astonishing diversity of products and accounts altogether for approximately 11,210 workers throughout 500 establishments.

Seventy-four percent of the total industry occupations are represented in two major groups--Toys and Amusement, Sporting, and Athletic Goods and Miscellaneous Manufacturing Industries. As of May 1977, these two groups reported 3,190 and 5,130 employees, respectively.

Following patterns of similar industries, a very high percentage of occupations fall in the Production and Maintenance category. In this case, almost 71 percent. Class C Assemblers make up the largest single occupational group with 12 percent of the total industry occupation.

The Miscellaneous Manufacturing Industries segment contributes a very small percentage to the total manufacturing employment in Texas, but the vast diversity of products and the corresponding demand should keep employment growing at a moderate pace through the mid-1980's.

Average Annual Employment for Miscellaneous Manufacturing Industries*

1975	10,400
1976	11,100
1977	11,200

*Source: Current Employment Statistics Program.

Table 61
SIC 39
Miscellaneous Manufacturing Industries
Statewide

This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; caskets; and other miscellaneous manufacturing industries.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	11,210	100.00	na	na
MANAGERS AND OFFICERS	790	7.08	3.23	84
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	390	3.39	na	na
Accountants and Auditors	50	.42	13.84	13
Designers	90	.83	14.62	17
Drafters	70	.58	24.06	9
Purchasing Agents and/or Buyers	80	.68	10.45	22
All Other Professional Workers	60	.51	na	na
All Other Technical Workers	40	.37	na	na
SERVICE OCCUPATIONS, TOTAL	180	1.61	na	na
Janitors, Porters, and Cleaners	140	1.26	7.31	23
All Other Service Workers	40	.35	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	7,910	70.65	na	na
Supervisors, Nonworking	200	1.74	5.62	28
Assemblers, Class A	130	1.13	17.38	5
Assemblers, Class B	490	4.42	29.77	12
Assemblers, Class C	1,370	12.26	11.01	21
Bench Hands, Jewelry	120	1.03	5.99	5
Cabinetmakers	40	.37	25.55	5
Casket Coverers and/or Casket Liners	70	.61	18.50	4
Compositors and/or Typesetters	40	.33	17.84	6

Table 61 (Continued) Miscellaneous Manufacturing Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Compression and/or Injection Molding Machine Operators, Plastic	40	.35	37.26	3
Crane, Derrick, and Hoist Operators	100	.88	23.81	8
Decorators, Hand	140	1.23	44.96	7
Delivery and Route Workers	30	.28	32.61	6
Electricians	70	.58	32.49	5
Electroplaters	30	.26	4.79	4
Etchers and/or Engravers	120	1.11	13.65	10
Fabricators, Plastics	70	.60	25.87	8
Filers, Grinders, Buffers, Chippers, Cleaners, and/or Polishers	90	.77	3.78	5
Finishers, Hand	90	.78	24.90	5
Gluers and/or Cementers, Hand	100	.85	32.61	6
Grinding and/or Abrading Machine Operators, Metal	250	2.27	9.34	9
Helpers, Trades	90	.82	18.42	6
Inspectors	130	1.12	1.53	8
Laminators, Preforms	30	.28	40.87	2
Maintenance Repairers, General Utility	100	.86	17.48	12
Metal Mold Makers	70	.66	7.29	3
Order Fillers	50	.46	12.42	8
Painters, Maintenance	40	.33	30.93	3
Painters, Production	320	2.86	14.89	25
Production Packagers, Hand or Machine	300	2.66	18.90	12
Ripsaw Operators	40	.34	11.82	4
Riveters, Light	40	.37	27.42	3
Sanders, Wood	50	.41	13.10	3
Screen Cutters and/or Makers, Nonphotographic	30	.29	32.21	3
Screen or Stencil Printers and/or Setters	90	.81	26.42	9
Sewing Machine Operators, Regular Equipment-Garment	70	.61	10.75	2
Sewing Machine Operators, Regular Equipment-Nongarment	100	.90	26.80	6
Sewing Machine Operators, Special and/or Automatic Equipment-Garment	30	.29	38.68	2

Table 61 (Continued) Miscellaneous Manufacturing Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment	60	.57	15.72	7
Sheet Metal Workers	150	1.35	11.02	14
Stone Setters	40	.37	7.15	6
Truck Drivers	60	.52	12.77	11
Vulcanizers, Rubber Plate	40	.38	14.75	6
Wax Pattern Workers	390	3.44	9.37	8
Welders and Flamecutters	110	1.02	17.03	12
Wood-Carving Machine Operators	30	.29	13.29	3
Wood Machinists	30	.26	13.49	3
Woodworking Machine Operators	50	.41	11.73	5
All Other Skilled Craftsmen and Kindred Workers	370	3.31	na	na
All Other Operatives and Semiskilled Workers	720	6.42	na	na
All Other Laborers and Unskilled Workers	690	6.14	na	na
CLERICAL OCCUPATIONS, TOTAL	1,540	13.69	na	na
Clerical Supervisors, Office or Plant	60	.50	10.20	9
Accounting Clerks	90	.81	7.20	21
Bookkeepers, Hand	60	.57	11.71	19
General Clerks, Office	230	2.01	6.67	29
Order Clerks	60	.53	7.13	8
Payroll and/or Timekeeping Clerks	40	.39	10.78	12
Production Clerks and/or Coordinators	120	1.02	7.43	14
Secretaries	190	1.67	8.42	34
Shipping and/or Receiving Clerks	90	.78	11.89	18
Shipping Packers	250	2.27	8.49	25
Stock Clerks-Stockroom, Warehouse, or Storage Yard	90	.76	8.63	13
Typists	50	.47	9.40	10
All Other Clerical Workers	210	1.85	na	na

Table 61 (Continued) Miscellaneous Manufacturing Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	400	3.56	na	na
Sales Clerks....................	100	.91	18.07	7
Sales Representatives, Sales Agents, and/or Sales Associates....................	300	2.65	5.83	32

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers..............................	84
Secretaries....................................	34
Sales Representatives, Sales Agents, and/or Sales Associates......................................	32
General Clerks, Office............................	29
Supervisors, Nonworking...........................	28

Table 62
SIC 39
Miscellaneous Manufacturing Industries
Dallas-Fort Worth SMSA

This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; caskets; and other miscellaneous manufacturing industries.

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	4,440	100.00	na	na
MANAGERS AND OFFICERS.............	310	6.97	6.17	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL................	180	4.01	na	na
Accountants and Auditors........	30	.72	17.20	25
Designers.......................	30	.72	20.07	20
Drafters........................	30	.61	18.29	11
Purchasing Agents and/or Buyers.	50	1.04	15.96	31
All Other Professional and Technical Workers.............	40	.91	na	na
SERVICE OCCUPATIONS, TOTAL........	70	1.49	na	na
Janitors, Porters, and Cleaners.	50	1.20	8.98	28
All Other Service Workers.......	2/			
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,080	69.68	na	na
Supervisors, Nonworking.........	80	1.81	9.23	28
Assemblers, Class B.............	200	4.48	29.09	12
Assemblers, Class C.............	630	14.16	8.24	22
Crane, Derrick, and Hoist Operators.....................	40	.79	39.86	11
Etchers and/or Engravers........	30	.77	10.00	9
Fabricators, Plastics...........	30	.63	21.73	9
Gluers and/or Cementers, Hand...	30	.74	25.98	11

Table 62 (Continued) Miscellaneous Manufacturing Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.1/	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Grinding and/or Abrading Machine Operators, Metal	80	1.90	22.51	11
Inspectors	60	1.24	0.00	5
Maintenance Repairers, General Utility	70	1.47	25.35	20
Order Fillers	30	.67	16.02	11
Painters, Production	150	3.46	16.00	26
Production Packagers, Hand or Machine	60	1.40	10.20	14
Ripsaw Operators	30	.77	13.21	9
Riveters, Light	40	.86	29.82	6
Sanders, Wood	30	.74	0.00	5
Screen Cutters and/or Makers, Nonphotographic	30	.61	38.17	5
Screen or Stencil Printers and/or Setters	40	.88	24.77	14
Sheet Metal Workers	60	1.38	22.47	11
Vulcanizers, Rubber Plate	30	.67	19.90	6
Wax Pattern Workers	30	.70	45.51	5
Welders and Flamecutters	60	1.42	28.02	14
Wood Carving Machine Operators	30	.56	4.05	5
All Other Skilled Craftsmen and Kindred Workers	190	4.39	na	na
All Other Operatives and Semi-skilled Workers	640	14.53	na	na
All Other Laborers and Unskilled Workers	380	8.60	na	na
CLERICAL OCCUPATIONS, TOTAL	630	14.12	na	na
Accounting Clerks	50	1.11	8.33	29
Bookkeepers, Hand	30	.56	19.60	23
General Clerks, Office	60	1.42	14.84	25
Order Clerks	30	.70	4.36	12
Secretaries	100	2.15	13.58	38
Shipping and/or Receiving Clerks	50	1.15	18.13	20
Shipping Packers	120	2.74	14.75	31
Stock Clerks-Stockroom, Warehouse, or Storage Yard	30	.65	10.47	15
All Other Clerical Workers	160	3.62	na	na

Table 62 (Continued) Miscellaneous Manufacturing Industries, Dallas-Fort Worth SMSA

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
SALES OCCUPATIONS, TOTAL..........	170	3.73	na	na
Sales Representatives, Sales Agents, and/or Sales Associates...................	160	3.55	6.25	38
All Other Sales Workers.........	2/			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers................................	83
Sales Representatives, Sales Agents, and/or Sales Associates.......................................	38
Secretaries..	38

Table 63
SIC 394
Toys and Amusement, Sporting, and Athletic Goods
Statewide

This group includes establishments primarily engaged in manufacturing dolls, doll parts, doll clothing, and stuffed toy animals; games, toys, and children's vehicles; and sporting and athletic goods, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT....................	3,190	100.00	na	na
MANAGERS AND OFFICERS.............	190	5.86	6.23	91
PROFESSIONAL AND TECHNICAL OCCUPATIONS......................	50	1.47	na	na
SERVICE OCCUPATIONS..............	40	1.19	na	na
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	2,520	79.33	na	na
Supervisors, Nonworking.........	60	1.91	9.75	45
Assemblers, Class C............	1,030	32.37	14.09	52
Compression and/or Injection Molding Machine Operators, Plastic......................	30	1.03	45.16	9
Finishers, Hand................	70	2.10	30.43	12
Gluers and/or Cementers, Hand...	80	2.54	37.77	21
Grinding and/or Abrading Machine Operators, Metal.............	60	1.85	13.38	9
Inspectors.....................	70	2.07	0.00	9
Maintenance Repairers, General Utility......................	40	1.34	37.66	18
Painters, Production...........	110	3.54	35.28	30
Sanders, Wood..................	30	1.00	17.61	9
All Other Skilled Craftsmen and Kindred Workers...............	120	3.76	na	na
All Other Operatives and Semi-skilled Workers...............	630	19.89	na	na
All Other Laborers and Unskilled Workers......................	190	5.90	na	na

Table 63 (Continued) Toys and Amusement, Sporting, and Athletic Goods, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS, TOTAL.......	320	10.07	na	na
General Clerks, Office..........	60	1.94	16.01	42
Secretaries....................	40	1.25	14.50	33
Shipping and/or Receiving Clerks	40	1.28	13.91	33
Shipping Packers................	70	2.03	14.17	36
All Other Office Clerical Workers......................	80	2.54	na	na
All Other Plant Clerical Workers	30	1.00	na	na
SALES OCCUPATIONS, TOTAL..........	70	2.07	na	na
Sales Representatives, Sales Agents, and/or Sales Associates..................	60	2.00	10.99	21
All Other Sales Workers.........	[2]			

1/ Based on unrounded data.
2/ Estimate below cut-off level so occupations will not add to category total.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers...............................	91
Assemblers, Class C................................	52
Supervisors, Nonworking............................	45
General Clerks, Office.............................	42
Shipping Packers...................................	36

Table 64
SIC 399
Miscellaneous Manufacturing Industries
Statewide

This industry includes establishments primarily engaged in manufacturing brooms and brushes; electrical, mechanical, cutout, or plate signs and advertising displays; burial caskets and cases; linoleum, asphalted-felt-base, and other hard surface floor coverings, not elsewhere classified; and miscellaneous fabricated products, not elsewhere classified.

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
TOTAL EMPLOYMENT	5,130	100.00	na	na
MANAGERS AND OFFICERS	430	8.36	4.88	83
PROFESSIONAL AND TECHNICAL OCCUPATIONS, TOTAL	230	4.62	na	na
Accountants and Auditors	30	.58	18.72	15
Designers	60	1.13	14.33	20
Drafters	60	1.19	25.55	13
Purchasing Agents and/or Buyers	50	1.05	13.12	26
All Other Professional and Technical Workers	30	.66	na	na
SERVICE OCCUPATIONS, TOTAL	70	1.28	na	na
Janitors, Porters, and Cleaners	70	1.28	13.28	25
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS, TOTAL	3,510	68.20	na	na
Supervisors, Nonworking	70	1.28	11.84	25
Assemblers, Class B	120	2.41	19.68	13
Assemblers, Class C	180	3.51	19.73	13
Cabinetmakers	30	.58	31.65	6
Casket Coverers and/or Casket Liners	70	1.34	18.50	7
Crane, Derrick, and Hoist Operators	100	1.93	23.81	15
Electricians	60	1.11	37.05	7

Table 64 (Continued) Miscellaneous Manufacturing Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWER PLANT OCCUPATIONS (Continued)				
Etchers and/or Engravers........	40	.79	39.10	4
Fabricators, Plastics...........	50	.99	20.16	13
Helpers, Trades.................	90	1.67	19.70	10
Maintenance Repairers, General Utility.....................	40	.72	11.84	11
Painters, Maintenance...........	40	.72	30.93	6
Painters, Production............	200	3.97	12.80	36
Production Packagers, Hand or Machine......................	190	3.68	6.96	13
Screen Cutters and/or Makers, Nonphotographic...............	30	.64	32.21	5
Screen or Stencil Printers and/or Setters................	90	1.77	26.42	16
Sewing Machine Operators, Regular Equipment-Garment.....	70	1.34	10.75	3
Sewing Machine Operators, Regular Equipment-Nongarment..	60	1.17	21.74	7
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment..........	50	.91	21.28	11
Sheet Metal Workers.............	110	2.10	15.41	23
Truck Drivers...................	40	.81	17.14	12
Wax Pattern Workers.............	300	5.83	10.94	9
Welders and Flamecutters........	80	1.63	21.78	16
All Other Skilled Craftsmen and Kindred Workers..............	180	3.51	na	na
All Other Operatives and Semi-skilled Workers..............	790	15.40	na	na
All Other Laborers and Unskilled Workers......................	430	8.29	na	na
CLERICAL OCCUPATIONS, TOTAL.......	640	12.71	na	na
Accounting Clerks...............	50	1.01	11.83	19
Bookkeepers, Hand...............	40	.76	17.00	19
General Clerks, Office..........	40	.85	18.89	19
Production Clerks and/or Coordinators..................	30	.66	25.06	19
Secretaries.....................	110	2.14	12.83	33
Shipping Packers................	110	2.18	16.97	19

Table 64 (Continued) Miscellaneous Manufacturing Industries, Statewide

Occupation	Estimated Empl.	% of Total Empl.[1]	Relative Standard Error (%)	% of Establishments Reporting the Occupation
CLERICAL OCCUPATIONS (Continued)				
All Other Office Clerical Workers	210	4.09	na	na
All Other Plant Clerical Workers	50	.99	na	na
SALES OCCUPATIONS, TOTAL	250	4.68	na	na
Sales Clerks	70	1.26	22.03	7
Sales Representatives, Sales Agents, and/or Sales Associates	180	3.41	8.80	37

[1] Based on unrounded data.

THE MOST COMMONLY REPORTED OCCUPATIONS IN THIS INDUSTRY AND THE PERCENT OF ESTABLISHMENTS REPORTING THEM ARE:

OCCUPATION	PERCENT
Managers and Officers	83
Sales Representatives, Sales Agents, and/or Sales Associates	37
Painters, Production	36
Secretaries	33
Purchasing Agents and/or Buyers	26

GLOSSARY OF TERMS

Benchmark Employment: A term which is used to identify specific employment figure(s) which existed at a particular point in time. In the OES survey program, the term benchmark is used in two ways: (1) It is the establishment or industry employment that existed at the time the sample was designed. (2) When estimates are made, it is used again to refer to the total universe employment for each estimating cell as of the reference date of the survey.

Current Employment Statistics Program: A cooperating program between the Bureau of Labor Statistics of the Department of Labor and the participating states. The primary objective of the program is the preparation of current monthly estimates, from sampled employers, of nonagricultural employment, hours of work and earnings.

ES-202: A quarterly listing of employment and contributions of all firms covered under the unemployment insurance laws of Texas. From this listing, the Manufacturing sample was selected.

Establishment: An economic unit which produces goods or services, for example: a consulting service, a factory, or a store. In most instances, each establishment is a single physical location and is engaged in one predominate type of economic activity for which an industry code is applicable. Establishments are also referred to as reporting units.

Estimating Cell: One size class in one industry.

Sample Weight: A numerical value that is assigned to an establishment during the sample selection. For example, if an establishment has an occupational employment of 25 and a weight of three, then for estimating purposes, the 25 employment will have a representation of 75 (3 x 25).

Sampling Error: The difference between data obtained from a sample and data which would have been obtained if the same survey methods were applied to collecting identical information from the entire population.

Sampling Frame: The sampling units actually available to sample.

Sampling Units: The establishments selected randomly from the universe.

Size Class: The stratification of an industry by employment. For example, establishments with employment of 10-19 would be in one size class, and those with employment of 20-49 would be in another size class, etc.

Standard Industrial Classification (SIC): A grouping of establishments primarily engaged in the same or similar lines of economic activity. In the Manufacturing division, the line of activity is generally defined as any function that excludes Government, Nonmanufacturing, Regulated Industries, and Trade. Throughout this report, SIC's are correlated with a significant numerical designation. For example, SIC 20 is Food and Kindred Products, SIC 25 is Furniture and Fixtures, etc.

Standard Metropolitan Statistical Area (SMSA): Includes a city (cities) of specified population which constitutes the central city and the county (counties) in which it is located. A Standard Metropolitan Statistical Area also includes contiguous counties and may also cross state lines. In New England, Standard Metropolitan Statistical Areas are composed of cities and towns instead of counties.

Universe: Total amount of establishments or units covered under the Texas Employment Security Law.

Usable Response: All receipts which, after initial classification and schedule review, are judged to contain usable OES data.

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